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ABSTRACT

This publication describes a proposed business management intern system designed to provide an alternative means of gaining employment skills for college-eligible high school graduates. In addition to discussing the design of such an internship program, the report also presents a proposal for conducting a four-year experiment to test and perfect the program design and to generate evaluative data. Under the internship program described here, interns would be hired by private employers and trained, over several years, to a job level typically occupied by entering employees with bacholor's degrees. The employers' training costs would be paid by both the interns and the government, based on the annual identifiable cost-per-student at typical state universities. (Author/JG)

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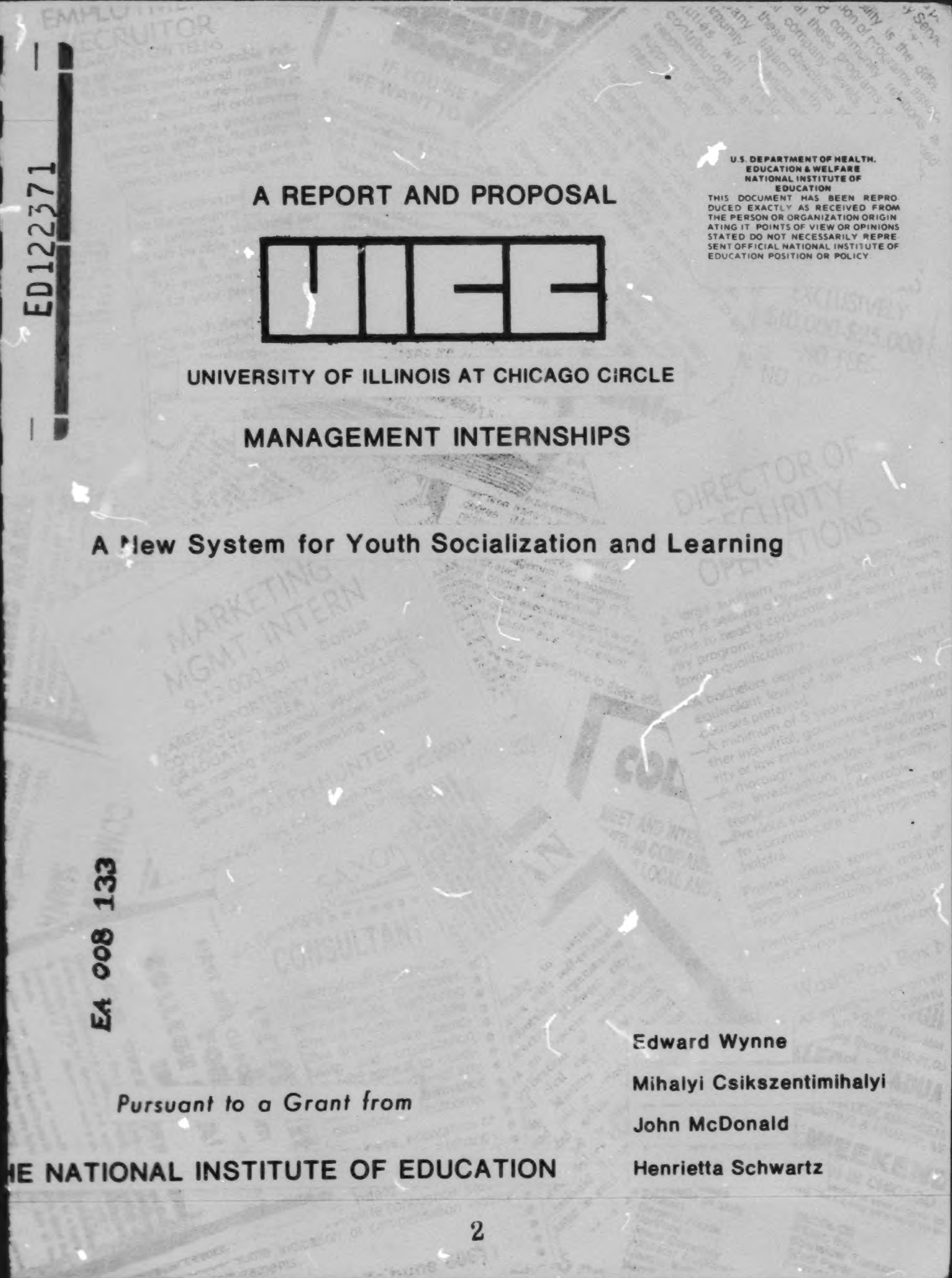

A REPORT AND PROPOSAL

UICC

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

MANAGEMENT INTERNSHIPS

A New System for Youth Socialization and Learning

EA 008 133

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Pursuant to a Grant from

HE NATIONAL INSTITUTE OF EDUCATION

MANAGEMENT INTERNSHIPS

A New System for Youth Learning and Socialization

Summary of Report and Proposal

The widespread practice of credentialism by business compels many able youths to attend college to become qualified to hold significant jobs. At the same time, many critics are recognizing that modern colleges are poorly adapted for transmitting to students many necessary work skills and attitudes. The following report describes a system for management internships designed to deal with this problem of unconstructive pressure toward college attendance.

Interns will be college-eligible persons without college degrees. They will be hired by employers, and trained, over several years, to a job level typically occupied by employees entering with Bachelor's degrees. The employer costs created by such training arrangements will be paid by both the interns and the government. Such costs will be based on the annual identifiable cost per student at typical state universities, i.e., approximately $3,000 per year. Interns will not spend a significant amount of their time on formal academic work, nor will they receive Bachelor's degrees at the conclusion of their training. Essentially, their training will be the natural outcome of their job responsibilities.

The intern who successfully completes his internship will possess a body of general work skills applicable to many jobs. Whether the graduated intern will stay with his employer will be determined by desires of the graduate and employer at the end of training; neither party is committed, in advance, to stay with one another.

A well-trained intern will have earned several references based on first hand observation of his work by qualified supervisors. Such references should enable interns to obtain responsible jobs with those employers who are concerned with the low level of work skills possessed by many college graduates.

The proposed internship system parallels many of the features of existing state university systems, such as the sharing of costs between students and the government. The system has actually been designed with a view to its ultimate adoption and financing by state governments: if the state will help to finance an eligible student's college learning, perhaps it should also help to finance valuable learning by college-eligible persons in other environments.

The report proposes that the system should be tried on an experimental basis for four years with thirty interns and one or more cooperating employers. Recruiting of interns would begin in September, 1974, and training, in summer of 1975. Such an experiment would permit the perfection of the design, and generate evaluative data. If it were successful, state legislation could be passed to foster wide-scale adoption of the system.

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In 1973 the National Institute of Education issued a $20,000 grant to the College of Education of the Chicago Circle Campus of the University of Illinois to design a new system for youth socialization and learning. The following text presents the design developed by the investigators, and simultaneously is a proposal to conduct an experiment to test that design.

MANAGEMENT INTERNSHIPS

> "It appears reasonable now, however, to look a little more carefully at the task of becoming an adult, to ask not the quantative question, 'How much more schooling?', but the qualitative one: 'What are appropriate environments in which youth can best grow into adults?'. It appears reasonable now, not merely to design new high schools and colleges, but to design environments that allow youth to be more than students." **Panel on Youth, President s Science Advisory Committee, Report.**[1]

The Problem

It is a popular truism that the socialization to adulthood patterns of American adolescents have changed dramatically during this century. However, there is less recognition that these changes are significantly correlated with symptoms of growing youth alienation, such as rising suicide rates. As for the socialization patterns, the influence of school and college has greatly enlarged, and the impact of other socializing forces has concurrently declined. Ample data supports this proposition. The growth of schooling is attested by the fact that persons born in 1895 attended school an average of 742 days in their lives; those born in 1965 should average 2,124 days attendance.[2] Post-secondary attendance has played an important role in this enlargement: in 1870, approximately 2% of the college-age youth population attended institutions of higher education; in 1930, the figure was 12%, now, it is 37%.[3]

The enlargement of school has been tied to a dramatic decrease in youth time spent in paid or unpaid employment. There were fewer gainfully employed workers between the ages of ten to fifteen in 1930 than in 1870, despite the quadrupling of the labor force in the same period.[4] Continuing this trend, labor force participation rates for youths between fourteen and nineteen declined from 64% in 1945 to 43% in 1962.[5] But the decline of youth involvement in adult-related work has affected more than paid employment. Farming has also been an important source of such work experience. But the proportion of American farming families has declined from 54% in 1900 to 5.2% in 1968.[6]

Despite many popular criticisms of overschooling, this enlargement of school has certain clearly beneficial effects. For instance, the average I.Q. level of male military recruits went up 22 points between 1918 and 1963.[7] Presumably this increase was at least partly due to the intensification and and prolongation of schooling received by successive cohorts of youth. Furthermore, economists have demonstrated that lengthened formal education may help increase the Gross National Product.[8] But other economists have levelled criticisms at some of these studies, since many important variables have not been controlled. For instance, sometimes no allowances are made for the differences in innate talent between persons who do and do not attend college. In other words, the substantial differences in lifetime earning of college graduates as compared to high school graduates surely, in part, simply reflects the fact that persons who attend and complete college are generally more able than those who do not. This does not mean that everything they learn in college is necessarily worthwhile; it simply means that able people go to college, and retain their ability throughout their attendance.

The research dealing with such complex variables is comparatively recent, and so further debates are predictable.[9] However, the basic proposition underlying this line of research -- that is not valid to simply compare the earnings levels of highly educated and undereducated persons -- is quite persuasive. That proposition implies that a credential-oriented hiring process, which stimulates many adolescents to graduate from some arduous training process (i.e., college) may well help that process to become a somewhat valid criteria of ability, because of growing proportions of the able people in society will choose to graduate from that process to attain success. However, the graduates may have their essential abilities without even participating in the process. Indeed, it is conceivable that the process could even (under current conditions) create graduates who have diminished their general abilities through participation.

But whatever the real benefits previously produced by prolonged formal education, there are signs that schooling may be receiving overemphasis as a socialization system. The most dramatic indicator of such overemphasis is the increase in the adolescent suicide rate. Between 1951 and 1969, the suicide rate of American males 15 - 19 rose from 3.5 per 100,000 to 8.6.[10] During those same years, the suicide rate for all Americans remained relatively constant. This increase occurred during a period of growing general prosperity and enlarging education. The increase indicates that certain groups of modern youths are suffering from intense distress. It is a sign of serious, long-range, and probably enlarging dysfunctions in our modern socialization process. There are other symptoms of severe youth alienation. Between 1960 and 1970, in California, the suicide rate for males 15 - 19 went from 8.7 per 100,000 to 15.9 -- nearly doubling in a decade.[11] During the same period, the California death rate of twenty year-olds due to all non-auto accidents and violence (drug overdoses, suicide, murder) rose from .00036 to .000728, an increase of 95%.[12]

The death rate from violence for other comparatively young cohorts in California (i.e., youths 15, or 25) also rose in that decade, though not quite so dramatically. There had beenno such increase between 1950-1960. (The state of California has the highest level of average educational attainment of any of the ten largest states.) The increases in the rate of youth death by suicide and violence should be seen as evidence of severe disaffection felt by many youths. Presumably, they exemplify what psychologist Jerome Bruner meant when he referred to the increasing trend towards "deep play" among adolescents.[13] He described deep play as "play where the stakes are so high that it is irrational for men to engage in it at all." It is safe to assume that for every adolescent dying from such causes there are many others undergoing lesser--but still very intense--degrees of loneliness, self-hatred, anger and despair.

There is explicit attitudinal data supporting this proposition. That data shows the steady and long-term growth of such despair and alienation among the young. For instance, successive classes at Haverford College, between 1948-49 and 1968, were asked to take the Minnesota Multiphasic Inventory test.[14] The test is a measure of attitudes. A sample of the responses from Haverford students is shown below:

TABLE 3.1

Sample MMPI Items for the Classes 1948–49 to 1968

	Per Cent True							
Item	48–49	52	56	60	64	65	67	68
When I was a child I didn't care to be a member of a crowd or gang.	33	35	35	38	49	58	49	47
I could be happy living all alone in a cabin in the woods or mountains.	23	28	31	38	33	35	42	45
I am a good mixer.	77	49	48	63	60	58	38	43
I like to go to parties and other affairs where there is lots of loud fun.	65	56	55	53	44	40	38	40
At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.	23	35	40	27	44	38	47	50
My worries seem to disappear when I get into a crowd of lively friends.	71	69	73	68	58	65	56	55
If I were in trouble with several friends who were equally to blame, I would rather take the whole blame than to give them away.	63	56	50	57	47	43	33	45
When a man is with a woman he is usually thinking about things related to her sex.	29	37	15	27	35	28	36	43
I enjoy reading love stories.	55	49	35	25	44	30	18	25
I like dramatics.	80	74	73	75	60	73	67	66
I would like to be a singer.	51	47	37	36	33	38	31	23

The responses reveal the continuing decline in youth ties to cooperative and group activities: more and more, the students want to withdraw from contacts or responsibilities connecting them to others. This pattern of decline long antedates some of the more popularly accepted causes of youth alienation, such as the Vietnam War. There are other data about youth attitudinal trends that are consistent with the Haverford patterns. Attitudinal tests were administered to students at Dartmouth in 1952 and 1968, and at the University of Michigan in 1952 and 1969.[15] Several similar questions were asked the students at both colleges. For instance, they were asked whether "Human nature is fundamentally cooperative". Agreement declined from 66% and 70%, at Dartmouth and Michigan respectively, to 51% and 55%. Another question asked them to say if "Most of what I am learning in college is very worthwhile." Agreement declined from 67% and 74%, respectively, to 58% and 57%. Another question asked the students to identify private and public institutions (e.g., school, church, family) that they felt related to. The total number and intensity of identifications identified per student was then summed. By this measure sense of identification declined from 296 and 259 to 269 and 206. A third group of published studies on trends in student attitudes were conducted at several unnamed private colleges between the early 1950's and 1966.[16] Those studies showed shifts on an attitudinal expression scale evaluating student desire for impulse expression from 41% (pro-impulse) to 54%, and a decline in the proportion of students describing the need to be liked as "very important" from 48% to 26%.

In addition, significant cross-cultural data about the alienating attitudes of young Americans was disclosed in a contemporary international study of youth interaction patterns in six cultures.[17] Five of the cultures studied represented undeveloped or primitive environments. The sixth group of subjects were children in a New England community. A similar rating scale was used by trained observers in all six locations, to enable them to evaluate youth conduct on the dimension of altruism vs. egoism. A total of 134 children between 3-6 and 7-11 were observed in the entire study; approximately 9,500 interacts were identified in the study. When the median level of egoistic conduct was treated as 50%, the American children, with a level of 8%, scored as the most egoistic. The next lowest group was a tribe in India, with a level of 25%. Despite the small number of children involved, the dramatically high level of egoism among the American children, when compared to the non-western cultures, suggests that the data may justify comparative generalizations about the overall level of egoism among American youths, or youths from industrial societies. The study is pertinent to the issue of alienation, since alienation is the natural counterface to egoism; the egoistic person will become alienated from others, as they reciprocate his conduct. Furthermore, a group of egoistic children (such as portrayed by the study) will all tend to ignore one-another, as they each focus on their self-concerns.

These patterns of long range attitudinal shifts tie-in very simply with the increase in youth suicides and the interest in violence. Man is fundamentally a social being. If a large class of persons develop attitudes that predispose them to deprecate or avoid sociability, they will experience a growing sense of loneliness, anxiety, anger and pain. The ultimate outcome of such feelings is a desire for violent, dramatic release: the release can be in the form of self-destruction, or in destruction directed at other persons and institutions.[18]

This growth of youth alienation is presumably the result of modern socialization processes. Apparently those processes are increasingly failing to teach youths the interactive skills and personal attitudes that enable them to constructively integrate themselves into society. The skills and attitudes that assist such integration constitute affective learning: that is, learning how to understand, shape and forecast patterns of emotions in ourselves and others. Unless young persons acquire such affective learning, they will naturally withdraw from complex human contacts, be uncomfortable about their own feelings, and be driven towards loneliness, boredom and anger. The irony is that at the same time our national levels of cognitive knowledge among the young are increasing, the ability of young persons to constructively participate in community life may be decreasing as their level of affective understanding declines. One might say we are seeing a lowering of the national level of youth common sense.[19] Like the increase in cognitive (I.Q.) scores, this change is also the result of adult policies. The particular modes applied by modern schools and colleges to shaping the lives of students are a key element of these modern policies. These institutions:

(a) Segregate the young from adults except teachers and their immediate family.

(b) Segregate the young from contact with youths not in their immediate age range.

(c) Segregate the young from contacts with youths with different ability levels, or from different socio-economic classes.

(d) Compel the young to submit to structures that demand they display an extraordinary degree of self-control and cognitive focus.

(e) Fail to encourage young people to participate in cooperative work efforts.

(f) Compel the young to work usually on school projects of abstract and long-range significance, unrelated to proximate social needs.

(g) Deprive the young of the chance to receive relatively immediate, commonly valued reinforcements (e.g., money, punishments, or pats on the back) in exchange for their efforts.

As schooling has been prolonged, academic teaching at all levels has become more professional and specialized: though educators, as a class, have many responsibilities, the kinds of work done by individual educators (e.g., guidance counsellors, sixth grade teachers, mathematics teachers) has become more restricted. Thus, the responsibilities of individual educators are more segmented, and they are less able to offer their students wholesome models of adult workers in control of their environment. It is true that the trend is towards lowering pupil/teacher ratios. However, larger schools and universities, elaborate, multi-course sequences and innumerable electives promote lessening emotional inter-action between teachers and students. Most teachers and professors work hard with their students, but the institutional structure compels the teachers to have many brief contacts with different students, compared to a smaller number of lengthy, intense, contacts with fewer students. Such perfunctory contacts may permit the teacher to transmit focussed cognitive information to the student; but they make it difficult for the participants to share strong emotions such as anger, pleasure or humor.[20] But unless strong emotions are fostered, accepted and dealt with in school, affective learning is impossible. One can no more learn how to express, organize, and interpret feelings largely by reading books, than one can learn how to cook, drive or play tennis by listening to a lecture. This does not mean that "affective instruction" should encourage students to express their emotions in chaotic and diffuse forms; however, the extreme restraint of emotional interaction is as dysfunctional as the disorderly outbursts of the alienated. In modern schools, with their low levels of emotional interaction and complexity, a pupil can properly feel that, while he has received a great deal of cognative information, no one really "knows" him. Furthermore, as the process continues, the pupil becomes increasingly afraid of being "known", or of "knowing" anyone else, since the less experience he has with intergenerational intimacy, the more uncomfortable it will appear. At the same time, at the deepest level, the pupil understands that he needs the intimacy which he fears and does not understand how to manage.

These patterns surrounding students -- specialization, bureaucracy, brief, transient relationships and infrequent occasions to release or exercise strong emotions -- are common to other aspects of our post-industrial society. Their appearance in school merely represents the application of basic American organization patterns to the rearing of the young. However, schools are probably more bureaucratic, more age and skill homogeneous, and less adapted to the exercise, release and training of emotions than most adult endeavors. Furthermore, young persons probably have greater need for affective learning than adults. It is one thing to expect an adult, who has learned affective knowledge, to accept an environment where possibilities for emotional release are restricted. But when we apply equivalent (or stricter) restrictions to the young, we may create extremely unhealthy confusion and ignorance, as the students "don't feel right," but do not have enough affective knowledge to fully understand what is wrong, or what correctives are appropriate.

Beyond the aforementioned suicide rate and the related data, there are other symptoms of school generated alienation among the young. The youth unrest and demonstrations between 1964-1970 was the most dramatic period of school unrest during American history.[21] The growth of youth interest in marijuana and other drugs is another symptom of dis-ease. Both the unrest and drug abuse were especially prevalent among youths from upper-middle class homes, attending the most advanced schools and colleges.[22] For instance, at the peak of high school unrest in the late 1960's, the most unruly high schools were not in the central cities, but in large suburban high schools (81% to 74%).[23]

Similarly, in the late 1960's, marijuana experimentation and usage was more concentrated among youths from comparatively affluent, school-oriented families: usage was 19% among suburban youths, and 13% among city youths; [24] youths from families earning $10,000 or more were three times as likely to have used marijuana as those from families with lesser income.[25] And the predisposition to use marijuana is an obvious sign of boredom, withdrawal and alienation. Another attitudinal study in 1972 showed that students with an "A" average in college were more pessimistic about the availability of work for any serious job seeker than students with a "C" average, or than high school graduates who were out working (45%-78%-82%).[26] In other words, the higher your grades or the less job experiences you had, the more pessimistic you became about anyone's job prospects.

The preceeding data about youth conduct and attitudes requires some interpretation. Obviously, disorder is not rampant among all American youths. There are tens of millions of adolescents, and many of them have high levels of affective skills. However the alienation is most intense among upper-middle class youths. This group is more likely to (1) attend more modern, cognitively-oriented schools and colleges, (2) be relieved from the need to work for a living while passing through adolescence,(3) be raised in homes that put a high value on school attendance and school-related interests, (4) live in suburban communities (as compared to central cities or farm areas) where there tends to be greater socio-economic and age homogeneity due to zoning codes, the reliance on auto transportation, and the patterns of housing developments, and (5) have parents who are likely to be highly educated and employed in productive, but relatively abstract, forms of work.

These factors suggest that youth alienation is not solely the product of the enlargement of school, but due to a subtle interaction between the enlargement of school and the decline of other traditional forms of socializing conditions for the young. Obviously, in the long-run, such shifts are interdependent. But, at this time in history, large proportions of youths are being exposed to prolonged (i.e., modern) school at the same time they are living in less modern home and community environments. Despite the handicaps to constructive socialization in the modern school, these youths (raised in traditional youth environments) may attain significant affective skills. However, such youths represent a transitional generation. It is evident that growing proportions of our young will be raised in environments where their modern school environment is complemented by a modern home and community environment. This may be a prescription for growing alienation and disorder.

At this time, the more dramatic forms of alienation are muted (unless some new kidnapping or ritual murder happens to get in the headlines in the near future). Still, alienation is a foundation on which dramatic outbursts are based. Since such outbursts are not essentially the product of the proclaimed causes, they are often aborted, as the protestors abandon poorly-planned or ill-considered conduct. But the abandonment of such conduct is of small moment -- unless remedies are advanced to correct the root causes. In other words, the growth of youth alienation -- as evidence by the data about shifting attitudes during the 1950's and 1960's -- set the stage for the drug experimentation, demonstrations and increasing suicides.

Despite the apparent quiescence at the moment, there are no signs of important attitudinal changes about the basic matters measured in the tests, e.g., feelings about cooperation, impulse expression, ties to public institutions. Indeed, as those attitudes are caused by adult-organized socialization patterns, there is little reason for them to change. For if anything is evident, it is clear that credentialism, subject specialization by teachers and professors, individualized (as opposed to cooperative) instruction, low levels of youth employment (as compared to the historic past) prolonged schooling and aspirations for rearing children in suburbs, are all deeply embedded in our society. Any class, subgroup or family whose children receive a disproportionately low share of these goodies feels discriminated against, and desparately strives to increase its slice of the pie. Therefore, unless significant corrective steps are taken, increasingly proportions of youths will be raised in exactly the same environments that generated the alienated attitudes we have described.

Who Bears the Cost

No matter what youths, from what classes, are afflicted with education-related alienation, the major dollar costs are borne by taxpayers. Even in higher education, in 1972-73, 46.2% of all higher education costs ($15 billion) were covered by direct tax contributions.[27] The federal contribution was $5.1 billion. In the case of state universities, the proportion of taxpayer costs are still higher.

Of course, when alienated students act out their anxiety via drug abuse, public disorder, or other disruptive conduct, the social and economic costs are thrust on the whole society. But dramatic disruption is not the only problem. The alienated students have greater visions of their capabilities than their earlier peers. For instance, the Haverford students had higher scores on objective tests than their predecessors and, in their questionnaire responses, displayed a growing belief in their personal capabilities: over twenty years, the proportion of students who believed that, if given a chance, they could render great benefits to the world increased from 45% to 60%.[28] Over the same years, students became increasingly withdrawn. Ironically, benefits to society must generally be delivered through cooperative efforts, and the modern students are actually less affectively competent than their predecessors. It may be contended that this affective ignorance among certain college graduates will speedily be corrected as they confront the realities of adult life. However, the soundness of this assumption is problematic. Of course, human attitudes change as people move through life. However, it is also understandable that the longer certain personal attitudes and styles persist, the harder they become to change. Affective ignorance at the age of 21 or 22 may be far harder to correct than at the age of 17 or 18. One of the few longitudinal studies of the prevalence of identifiable college-inculcated attitudes concluded that there was a relatively high correlation between the values of college seniors of a particular college (Bennington) and the values they held twenty-five years later.[29] And so, our current socialization processes may be creating an enlarging pool of withdrawn adults, who possess certain widely accepted credentials and who imagine that they have important capabilities. Such a process is a sure prescription for social conflict. The cost of this conflict will be borne by the whole society.

These problems give special relevance to the warning John Dewey uttered 55 years ago:

> "...As formal training and teaching grow in extent, there is a great danger of creating an undesireable split between the experience gained in more direct associations and what is acquired in school. This danger was never greater than at the present time, on account of the rapid growth in the last few centuries of knowledge and technical modes . . . . To avoid a split between what men have consciously known because they have learned it in the specific job of learning, and what they unconsciously know because they have absorbed it in the formation of their characters by their intercourse with others becomes an increasingly delicate task with every development of schooling."[30]

This growth of youth alienation is probably one of the profound challenges facing America. The implications of the problem for the long-term health of society are evident. Furthermore, the alienation is apparently caused by a combination of forces promoted by major public institutions, and that are sustained by popular aspirations. Still, a continuing increase in youth alienation -- if evidenced by further rises in the youth suicide rate, more youth terrorist groups, some new fad in drug abuse -- will eventually stir society to take corrective actions that are now regarded as unthinkable. In other words, some people and institutions -- perhaps even people now reading this study -- will be driven to drastically change the ways they think and act. Nineteen seventy-four may be a good time to begin testing some of these "unthinkable" corrective actions. Hopefully, some of the bad correctives can be washed out, and the good ones sharpened-up, in time for the moment when society decides that some drastic medicine is necessary.

Experiments and Reforms Proposed

A number of reforms have been proposed to deal with the affective shortcomings in formal education.[31] Some of these reforms have been based on the theory that, given the character of modern society, no mode of formal schooling can assist constructive socialization. These reformers have proposed the abolition of school, on the assumption that society will somehow take up the abandoned task.[32] The proposal is provocative. But it is simplistic to assume that substitute institutions and arrangements can appear without planning or consideration -- and that Americans will undertake such drastic steps well-thought-out without alternatives.

Many reformers have tried to restructure school programs to emphasize affective learning. For instance, efforts have been made to combine college (or high school) and work experiences. Antioch College has conducted a continuing program of this sort (alternating three months work, three months school). The Office of Education has funded several school-without-walls experiments in colleges -- where the students receive some credit for portions of their job experience.[33]

However, there are serious barriers to such efforts. For instance Antioch is suffering of severe financial problems, due to the overextension of its resources in its field program. Many criticisms have been made about the amateurism and romanticism pervading the school-without-walls and free school movements.[34] Credit for out-of-school experience is severly restricted by the patterns of academic institutions. For instance, we know of no four year college (apart from Antioch) that will award more than a year of academic credit solely for field experience.[35] Even those institutions restrict their awards to specially focussed and limited experiences. There is some logic to such limitations: not all experience is of equal value, and so a process of evaluation is required. Furthermore, the essential assumption of any college must be that

What is taught in college is different than what is learned on most jobs. Otherwise, there is no sense to maintaining an expensive faculty and buildings. In any event, the current maximum levels set for of "credible" field experience means that no amount of quality of away-from-college experience can replace three academic years in college.

Another possible mode of academically crediting field experience is through the College-Level Examination Program (CLEP), developed for the College Entrance Examination Board by the Educational Testing Service.[36] Especially competent high school students may attain advanced placement through the CLEP General Exam, just as many bright college freshmen may be able to perform at a sophomore level on some college subjects that are anticipated in college prep courses in high school (e.g., English, some math). But the CLEP subject examinations covering particular disciplines require the attainment of the specialized vocabulary of each discipline (e.g., sociology, business management). The vocabulary can only be attained through taking a course, or reading text-books. (See Appendix for sample questions.) However, it is obvious that many persons have high levels of affective and business skills , but do not possess academic vocabularies, or do not analyze their skills via such concept systems. Ironically, we have heard of some junior colleges in the Chicago area that are offering courses to prepare students to take the CLEP exam.

There is one comparatively successful mode of tying-in school and work. This is in the field of cooperative education, where students alternate school and work in programs which usually strive to integrate the school and work experience.[37] Many co-op programs are at the high school and two year college level, and presumably are aimed at students lacking the potential to succeed at four year colleges. However, there are some four year colleges that have co-op programs. Northeastern University in Boston is the most widely recognized of such institutions. As part of the research for this report, Northeastern was visited by the principal investigator, and pertinent data collected from its Center for Cooperative Education. Northeastern recognizes that cooperating employers hope that high percentages of their co-operative students will remain with them after graduation. "Most employers feel a 50-60% retention rate is a minimum to be considered satisfactory."[38] In some of Northeastern's under-graduate programs, retention rates meet this criteria: the rate in Engineering is about 60%; Nursing, 80-90%; and Business Administration, 45-50%. However, in Liberal Arts and Education, the retention rates are 10% or less. The operational effect of a low retention rate is that co-op employers working with programs with the low retention rates are reluctant to assign serious responsibilities to students, or to make their work part of a significant career progression. In other words, students in programs with low retention rates are assigned by employers to dead-end jobs, with only modest learning potential. Only small proportions of Northeastern's liberal arts students participate in the co-op program, perhaps because they realize they will be put in such jobs, just because their learning is partly exploratory.

Although cooperative education programs do provide desirable work-school ties, their growth is dependent on the maintenance of a high retention rate of graduates by cooperating employers. Later in the proposal this issue of "earning" employer cooperation will be amplified. But at this moment one can say that attempts to greatly enlarging the number of co-op education students in four year colleges, will face serious barriers in view of the (1) desire of employers to take students who will want to stay in the same field and with the same employer they trained with as a college student, and (2) reluctance of late adolescents to make such prolonged career commitments. Indeed, it is significant that the cooperative education at the four year college level has grown at a comparatively slow rate -- perhaps due to such barriers. Paul Dube, Director of the Center, agreed that experiments with programs that subsidized the training costs of employers (rather than relying on the benefits employers obtain from retaining graduated students) might prove a worthwhile innovation.

Another corrective to overschooling that has been proposed is the application of the concept of career education. Career education strives to give greater on-the-job relevance to the formal education process. Several alternative and complementary models have been proposed.[39] At least one gives heavy emphasis to work experience.[40] However, much of the "work experience" described in that model is not "work"; it is observation, rather than the carrying out of responsible assignments. Furthermore, the work has little contact with professional or executive level operations. The designer of the model conceded that efforts to apply even this restricted model have had to overcome significant employer resistance.

Clearly, career education gives promise of answering some of the needs suggested in the preceeding outline. Still, up to this moment, the program largely aims at (a) training youths for technical or sub-professional work, or (b) providing supplementary career information for youths who will go the full college route. In other words, at this time, the career education concept apparently assumes that a youth with significant academic talent will spend sixteen years in school before accepting responsibilities in work that might be relevant to his later professional or business career. This means a continuation of the existing assumption that prolonged schooling during youth is the sole career route open to youths with considerable talent.

The consideration of alternative modes of enriching the affective learning potential of school experience must confront one general proposition: modern American schools are organized to transmit cognitive knowledge. Their staffs, architecture, reward systems for students and professionals, locations, etc., have all been designed to increase students' learning of formal school subjects -- even though such designs may frustrate the learning of affective skills. As a result, all proposals to radically redirect the priorities of schools and colleges will inevitably be seriously distorted, as they are shaped to minimally interfere with the existing system. This pattern explains why the CLEP exam -- to evaluate experience -- simply becomes another subject for which you read a text or take a course, or why a student can get some credit for some field experience, if he also does three years of formal course work. Efforts to increase in-school affective learning are thus severely hampered. Persons concerned with improving affective learning must recognize that the issue is whether to enrich affective learning by (1) changing school, or (2) changing the out-of-school world to make it more accessible to youth learning. At this developmental stage, neither of these alternatives should be pursued exclusively by our society. However, most observers would conclude that improvement efforts so far have been aimed at changing the formal education system, e.g., CLEP, school-without-walls, academic credit for field service, free schools, career education modules. It is hard to identify a single substantial contemporary effort aimed at delivering public resources to employers to increase the accessibility of work to able students. This gap in our development efforts is especially distressing, in view of the conclusion in the most recent study on the problems of youth socialization:

> The benefits of incorporating non-cognitive activities into schools are far fewer than those from organizing those outside of schools. The principal benefit of the former path appears to be organizational "neatness" and the insurance that all youths will be "covered" by such activity to fit the organizational characteristics of a school, a distortion that strikes at the very heart of the activity.[41]

The Economics of Significant Youth Employment

One obvious step to increase affective learning -- and to diminish alienation -- is to increase the amount and variety of work experiences available to youths. Work is an environment which (1) is largely intergenerational, (2) compels each employee to learn to relate to many persons with different styles and abilities, and (3) asks employees to participate in the production of goods or services that are felt to be relevant by their purchasers. As a result of such responsibilities, young workers acquire important affective skills and can relate their lives to the fabric of adult society. The more complex and responsible the tasks given an employee, the greater the degree of learning and relevance. A first barrier to the increase of youth employment is the economics of the on-the-job learning process. Those economics have been explicated in a basic work by economist Gary Becker.[42]

In summary, training and socializing inexperienced employees to do responsible work costs employers a good deal of money. The greater the inexperience and the higher the skill sought, the more costly it is. These costs encompass the time of skilled employees who train and oversee the beginner and the operating costs -- lost customers, slow-down in work processing -- that inevitably results from the work of a beginner.

Even if the youth is unpaid (i.e., in a volunteer program) the employer may have a substantial cost. It the volunteer is to learn from a job; he must have a responsible assignment. If the assignment is responsible. someone can be hurt by the volunteer's error. As a result, he must be supervised. This costs money. Without responsibility and supervision, the volunteer will just be going through the motions. Because of the economic costs of giving volunteers responsibility and supervision, it is not clear that large-scale youth volunteer programs are a realistic answer to affective learning needs. It is not that volunteers never learn; but learning will not take place without planning and supervision; indeed, the costs of adequate supervision and planning may be so high that it can really be educationally "cheaper" to put the volunteers on salaries and treat them as employees. Paid employment naturally provokes planning and supervision; many employers may be prone to treat volunteers as a no-cost item, give no thought to their careful use, and have many bored and frustrated young persons killing time in marginal jobs.

In the past employer break-in costs for young employees were covered by:

(a) Apprenticeship agreements which bound the youth to the employer long enough for him to get back his costs,[43] or

(b) The fact that the youth was employed by his own family (on a farm?) or a close friend of the family (under such circumstances, the employer was giving a favor within a tight social circle, with the implicit expectation that there could be a favor in return someday)[44] or

(c) The fact that many simple jobs permitted a youth to quickly make a constructive contribution through physical labor.

However, these factors have all diminished or expired. Therefore, youth employment has become a perennial problem in American society. It is unprofitable to hire a young person until almost all adults have been put to work; unsocialized youths are not usually effective employees. Employers, to escape training losses, have turned to school and credentialism, hoping that these public systems of socialization will spread learning and socialization costs throughout society.

Of course, many employers have training programs, but the interviews underlying this report supported the conclusion of Becker's seminal book. Many employer-financed training programs that were identified were for unskilled or semi-skilled jobs, where the training period was no more than a few months. Such training costs were not extensive. Some firms did have management training programs, but closer inspection revealed serious drawbacks to such programs (from the trainee's perspective). Typically, such programs assumed that the trainees would move through a number of positions to acquire the appropriate experience. However, the tempo of such movement was often not determined by the needs of the trainee; frequently, the job slots above were not vacant when the trainee was ready to move up, and the employer could not afford to have the trainee move up and cause the unit to be overstaffed. So the trainee waited until business considerations -- as opposed to learning considerations -- justified the move. In a competitive market, the employer's conduct is justifiable. But such patterns stimulate potential trainees to go to college, where their learning progress is independent of business factors, with the hope that their degree will enable them to by-pass the problematic training process. Unfortunately, four years of college may cost society (perhaps $10,000-$15,000) far more than the employer's cost if the trainee's advancement pace had been determined by learning considerations. However, at present there is no way of compensating the employer who gives learning considerations a high priority. Furthermore, the trainee may also have learned far more affective skills in a well-structured program of increasing job responsibilities than in college. But the current economic structures that support learning, with their pro-academic bias, deprives the trainees and employers of the possibility of receiving support for such learning.

Under the circumstances, we cannot expect employers to hire large numbers of comparatively untrained youths in responsible jobs and give them supervision -- without expectations that high proportions of such trainees will stay with the employers. This is why Northeastern's co-op employers will abandon serious cooperation when their retention rate goes below 50%. But fluidity of modern youth labor markets demonstrates the unrealism of such expectations.

This discussion explains the causes of many perceived shortcomings in federally supported on-the-job programs. The work-site is a good learning environment -- if modifications are made to allow for the comparative ignorance of many learners. Many modern jobs are not designed to make such allowances. Under such circumstances, untrained persons are "eaten up" by the environment, as they do not receive the support they need. Making the work-site a better learning environment for the comparatively untrained takes planning and long-term commitments of money, to encourage the employer to gradually redesign his job descriptions and incentive systems to facilitate learning. Such redesign is not a simple process; it is not always easy to see how some job environment frustrates learning by willing but inexperienced employees. Furthermore, year-to-year funding patterns discourage significant redesign, since substantial redesign may only be justified by the assurance of a long-range payoff. But, without added resources and planning, competitive forces will compel employers to drive out less trained employees, rather than bearing the costs of their learning.

This analysis of on-the-job learning by the young is supported by first-hand observations of programs that strive to relate school and work in situations where they were poor prospects of the employer's retaining the student after graduation. Some school-based field-experience programs are driven to put students in marginal community activities (e.g., Gay Liberation, Planned Parenthood, nursery centers) because established institutions and business are unwilling to accept the economic costs involved in responsibly using volunteers. In other work-study programs, students are often assigned repetitious or limited tasks, to diminish the demands on their supervisors.

Another unfortunate effect of this process of volunteer assignments and marginal work is to reinforce the already narrow vision many students have about gainful work. As suggested in the Haverford data, many students have unrealistic ideas about their ability (at the same time they are possessed with latent fears about their incapacity). Volunteer jobs are all too often vehicles for the satisfaction of unrealistic fantasies founded on this unstable combination of egoism and alienation; in such jobs, some students imagine themselves offering their talents to the services of the "oppressed peoples" with whom they identify. Well-designed volunteer programs may bring these fantasies down-to-earth in a manner that does not produce unhealthy cynicism. However, without such careful design, student alienation may be further aggravated.[45] But responsible work in business is another way of decreasing such fantasies; perhaps such work may stimulate students to see that not only teachers, social workers and professionals (i.e., persons in schools, or in work requiring long academic preparation) are engaged in helping to make society work.

Some Parameters

The investigators attempted to design a system to deal with the foregoing difficulties. In the design process, they consulted with a large number of persons in business, government, foundations and academic institutions. (See Appendix, for some persons consulted.) Naturally, some persons consulted had disagreements about aspects of the system finally designed. However, a high proportion of those consulted thought the final design was well-worth trying. Consultations ranged from a day-and-a-half conference, or a trip to Northeastern University, to innumerable phone calls and letters. The investigators determined that certain parameters should govern their final design:

1. The system should aim to raise the level of affective skills of college-eligible persons, age seventeen and over.

2. The system should increase the authority and responsibility exercised [illegible] these youths, and place them in away-from-school job environments where they are well supervised, and surrounded with diverse role models and varied challenges. The system should ultimately be largely financed by public funds, or the new learning environments will be unable to compete with publicly-supported higher education, where persons providing learning environments are paid by taxpayers. The system will not aim at solving all the education problems now existing in America, nor at trying many other possible answers to the problem we have just outlined. It will merely be directed at the problems of perhaps one-third of our college eligible youths (approximately four million persons), and at increasing their opportunities for away-from-school learning.

3. The system should be designed so that it may ultimately be adopted by state governments; to facilitate such adoption, some of the characteristics of the system should be akin to those found

in existing state university systems, so that adoption will not mean accepting an entirely new approach.

4. The system should pay businesses for training youths up to the job entry level (or perhaps one step above) usually occupied by B.A. graduates.

5. The administrative structure of the system should be very simple, and every effort made to use market mechanisms and the judgements of individual youths to insure its efficiency.

6. The system should assign greater personal authority, responsibility and rewards to youths than do typical colleges; conversely, youths should suffer greater penalties when they fail to meet clearly identified responsibilities.

7. The work-based structure of the system should not be significantly constrained to enable participants to obtain a large number of college credits (or a degree) at the end of their service. This would not preclude negotiations between the system and higher education towards this end; it would preclude committing substantial amounts of away-from-work intern time or extra resources to that purpose.

The Proposed System

The system eventually designed was called "Management Internships". The term "management" does not limit the system to supervisory positions, but is intended to communicate the expectation that successful interns, at the end of their four years, should (1) possess skills appropriate to jobs in the $10,000 - $15,000 range and, (2) have adequate prospects for continuing advancement. The system will have the characterisitics described below:

Interns -- males and females -- can apply to enroll in the program at any time in their lives. However, they must have high school class standing and/or test scores that indicate their ability to succeed at their state university. Every year of higher education they have received before enrollment will be deducted from their four year in-the-program entitlement.

During their high school senior year, potential interns (and possibly their parents) will familiarize themselves with the nature of the program, through visits to employment sites, and a seminar and field assignments about work-type responsibilities.

The employer will develop a general written outline of the job assignments that interns will progress through in the program. The outlines will specify the character of the skills the intern will eventually attain. The skills will pertain to communication, planning, accepting individual responsibility and authority, and effectively participating in cooperative tasks. Some of these skills will add to the general emotional maturity of the intern; others will prepare him to satisfy requirements of specific jobs. The skills finally acquired by the intern may be up to one step above those usually possessed by recent college graduates.

Internships will generally last for four years. The length of the internship will be settled by the employer and the intern before enrollment.

Neither the intern nor the employer will be committed, in advance, to staying with (or keeping) one another after the internship. The intern's skills should enable him to attain equivalent work with a number of employers. It is true that some employers may now favor holders of college degrees as applicants for such positions, but many employers have contended that B.A. holders are often poorly trained for work. This program assumes that employers will increasingly tend to favor well-trained, mature non-college graduates.

Each intern will be assigned to a mentor. The mentor will be a middle-level management person on the employer's staff. Mentors will volunteer for their responsibilities. The mentors will not usually be directly supervising interns. However, the mentor will accept personal responsibility for counselling and helping the intern the company accepts to succeed in the program. The original mentor will be expected to stay with, and be available to, the intern through the intern's entire experience. The relationship between the intern and mentor will be personal -- for instance, they may have lunch together weekly.

At the time of enrollment, the employer, the mentor, the intern and (possibly) his parents will sign an understanding outlining their responsibilities under the program. Enrollment will be celebrated as a public occasion, attended by friends and relatives of interns, and appropriate company employees. The general terms of the agreements to be signed between employers and individual interns are presented at the end of this outline.

Communication will be encouraged among interns and among persons acting as mentors.

Employers will recruit interns into the program. But once a youth is accepted, the employer will suffer predetermined economic penalties if he is a dropout or is fired. Youths will have similar freedom in accepting enrollment. But if a youth does drop out or is fired, he will also suffer a predetermined economic penalty.

Interns' starting salary, and wages throughout the internship, will be determined between the intern and the employer.

The employer's present employees are eligible to apply to enroll in the program as interns if they satisfy the enrollment criteria and are willing to accept other constraints placed on interns. Special understandings will be devised to allow for some of the advanced knowledge of such interns.

Employers will be subsidized by the government in recognition of the expenses they assume in conducting such a program. Interns will pay to the government a payment equal to the standard tuition at their state university. The employers total annual subsidy per intern year (for interns who complete the program) shall be equal to the annual identifiable economic costs of a student's attendance at the state university. Since many state universities have scholarship programs, some form of scholarship program will be included in the system, though its parameters are hard to define at this moment.

The government will not play a significant role in working out differences between individual interns, mentors and employers. All parties concerned volunteered for the program, and presumably all want it to be a success. If misunderstandings or problems arise, discovering how to settle such differences will be one of the most important learning experiences available to interns. Responsibility and authority are not fostered when outsiders come in to straighten out every difficulty that arises. The interns also may often have their parents available for practical advice.

All agreements between employers and individual interns must be publicly filed at an accessible central place shortly after their execution in order for employers to receive government support.

The amount of academic training, if any, to be required of the intern during the internship is to be determined between the employer and the intern. If the intern accrues a significant number of academic credits through a publicly supported institution (say, over twenty-five in four years) the employer's government payment will be reduced on a pro rata basis, to allow for the training costs that have been transferred back to the taxpayers. Of course, the intern will also be free to undertake any academic work he wants as long as he also meets his job responsibilities -- though the twenty-five credit ceiling on publicly financed education will apply equally to course work of his own choosing (since the public is already paying once for his post-secondary education).

Basic Provisions of Individual Intern's Agreement with Employer

1. Length of intern's service commitment.
2. General specification of skills and earning levels to be aimed at.
3. General specification of skill experiences, including formal academic work, to be required.
4. Designation of mentor, general specification of responsibilities, commitment to keep mentor available throughout service.
5. Representation, by intern, about quality of previous publicly supported higher education received.
6. Procedure for amendment or refinement of written agreement, by parties.
7. Provisio that the agreement constitute only a gentlemen's understanding by both parties. The agreement can be ignored by either party if they are prepared to accept the economic and emotional consequences.
8. Salaries paid to interns are worked out between employer and the intern, independent of the agreement.

The System Measured Against the Parameters

The system places youths in the environments where most of the responsibility and authority in our society is exercised: in profit-making businesses. Business is an environment composed of persons of many ages, classes and levels of skill. It provides high rewards for persons adept at cooperative work, and who know how to orgainze their emotions and to understand those of others. It is therefore a powerful environment for teaching affective skills. Conversations with employers have revealed that the interns will usually be paid 100% of the salaries of other employers doing similar work. Over four years their wage rates should rise from $5-6,000 to $10-15,000. Such wages will stimulate the employer to give the intern responsible work and, ultimately, careful supervision. While the investigators have focussed their studies on the adaptability of the system to profit-making businesses, it appears that the system is equally adaptable to non-profit environments, e.g., government agencies, hospitals.

The system, despite its innovative character, has many parallels with existing state university systems. Its entrance requirements are similar, its basic length of training is the same, its cost to interns and the state are equal, and finally its level of income outcome is approximately the same.

The comparatively simple administrative structure of the system -- government will pay as long as the intern continues his payments, and the employer keeps paying his salary -- is tied in to the responsibilities and authority given the intern. Essentially, the intern is given a great deal of authority over his own learning. It is up to him to decide whether the program is a waste of time. If he decides it is, his first option is to try and persuade the employer to change the situation. He is not without persuasion tools: if he quits, the employer loses the annual payments and a completion incentive. Furthermore, the intern can easily become familiar with the agreement provisions given to other interns by all employers, and can arrange to consult with these interns -- whose names are available to him. So the intern is invited to "protect himself", and given some tools to use. Indeed, the tools given to the intern are more powerful than those often available to the millions of late adolescents (who often are not of college caliber) now working on full-time jobs, who cannot threaten their employees with the loss of annual payments and an incentive payment if they become dissatisfied and quit.

But the intern is not only given power over the employer. If he quits cavalierly or is fired for incompetence, he also loses the incentive that awaits him at the end. As a result, the intern is stimulated to apply his power with caution, since if it is used overcasually, it may be hurtful to him. So the intern's task becomes to learn how to judiciously apply authority -- a powerful piece of affective learning.

The intern's power is not without responsibilities. In some situations, the intern may be tempted to stay in low learning, low demand job situations, and not ask more of the employer, since the 100% wages he is receiving may make the job situation economically beneficial. We may analogize this to students who take courses in trivial subjects in which they will get "A's", as compared to important subjects where their grade will be less, since they are seeking good grades rather than important learning. However, the intern will be paying a substantial annual tuition. If he is in the program for the short range pay benefits, he will be motivated to quit the program and keep his present job rather than continue "tuition" payments. If he is in to learn, he will strive to persuade the employer to move him on to more challenging work, even though such striving and challenges may be uncomfortable to him.

The structure will enable successful interns to learn about one of the most important affective skills: commitment. This critical matter should be expanded on. Commitment is the ability to make and keep long-range commitments based on imperfect information. Put simply, commitment is simply a central affective skill. Frederick Nietzche's comment on this is pertinent: "The essential thing 'in heaven and earth' is apparently that there should be long obedience in the same direction; there thereby results, and has always resulted in the long run, something which has made life worth living."[46]

The attainment of healthy commitment is partly dependent on our own self-knowledge (about our desires and potential), and our skill at acquiring information about the topic at hand before commitment. But skill at commitment is also dependendent on our ability to reshape the topic of our commitment after commitment. In other words, after we have made a commitment to a career, marriage, or friendship, we do not surrender all control over the topic. But neither are we all-powerful. An essential affective skill of able adults is to understand how to exercise the post-commitment power we possess to reshape the environment to which we have committed ourselves; another element of this skill is to learn how to alter our own expectations so that we adapt to this new, post-commitment environment; finally, we may need to learn if and when the appropriately break explicit or implied commitments, and live with the inevitable costs.

Modern youth environment provides meager training in commitment. Many environments are completely involuntary (e.g., high school or, often, college) and therefore there is no choice or decision. On the other hand, there are few clear penalties attached to drifting in many academic environments. As a result, students presumably are not sure about (1) the kinds of persons they are, (2) how to acquire pre-commitment information, (3) how to change environments once they are in them, (4) how to keep commitments they have made, and (5) how to best, and if to best, dissolve strong commitments. These student shortcomings in dealing with the challenge of commitment are revealed by the growing proportions of college students who shift programs within one college, or transfer from one college to another.[47] Such patterns of instability may be equated with growing freedom, but they may also be interpreted as symptoms of affective incompetence, i.e., poor judgment. Ineptitude in making and keeping commitments will be highly associated with alienation, since commitments are a process of trading: people who cannot make strong commitments will not have others make commitments to them, hence they are "away from things."

Since the proposed system aims to increase the integration and maturity of graduates, it has been designed to help students learn about this powerful force. In this particular, the system dramatically contrasts with current trends in undergraduate education, which facilitates student mobility, and thus frustrates the acquisition of maturity by adolescents. Of course, one should distinguish between the nature of commitment learning required by adolescents compared to adults. Mature adults may make good use of fluid environments, where low levels of commitment are required, e.g., a comparatively transitory cognative learning situation such as a conference. However, such adults have already presumably learned about commitment through their own commitments to careers, marriage or friendships. As a result, they can make judicious decisions about how to make or avoid commitments. But the fluidity that can be profitably used by adults may not be constructive to comparatively immature persons.

What Affective Skills Can Interns Learn On a Job

One can identify many situations where the management and understanding of emotions is central to on-the-job competency. For instance, consider affective skills in three categories we can designate as communication, supervision and goals. Each of these categories can be simply divided: "communication" into transmitting and receiving; "supervision" into receiving supervision and being subject to supervision, and "goals" into participating in goal definition and devising plans for goal attainment. For amplification, let us take one subcategory, "receiving supervision" and develop a taxonomy for it.

The subcategory of receiving communications can be divided into three elements: media, or ways of transmitting communications; different transmitters of communications, and diverse topics of communication. In other words, each message we receive comes through particular media, is sent by particular parties, and concerns particular topics. Thus, any substansive message can have different emotional significance for the receiver, depending on the media or sender. A receiver with substantial affective skills should be able to identify and appropriate emotions underlying any mix of elements. But further complexities arise. Each element can be broken down into components: three different kinds and combinations of media, senders, and topics.

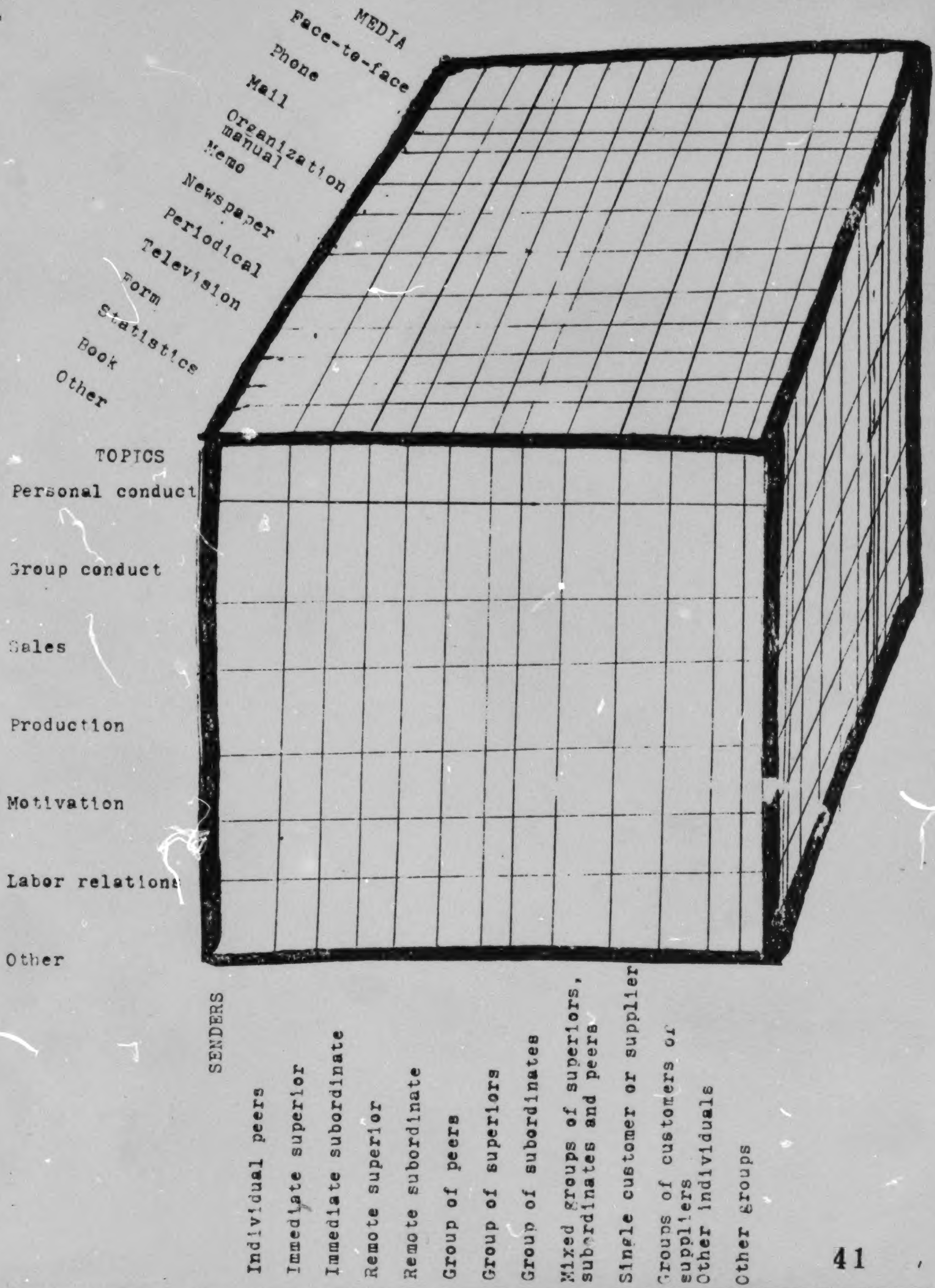
Media
  Face-to-face
  Phone
  Mail
  Organization manual
  Memo
  Newspaper
  Periodical
  Television
  Form
  Statistics
  Book
  Other

Senders
- Individual peers
- Immediate superior
- Immediate subordinate
- Remote superior
- Remote subordinate
- Group of peers
- Group of superiors
- Group of subordinates
- Mixed groups of superiors, subordinates and peers
- Single customer or supplier
- Group of customers or suppliers
- Other individuals
- Other groups

Topics
- Personal conduct
- Group conduct
- Sales
- Production
- Motivation
- Labor relations
- Other

There is a relationship between these items. An intern may need to learn the affective skills required to receive face-to-face communication from an immediate superior about a variety of topics; and different topics (e.g., how to dress, how to fill out a form) may pose different problems. Being able to receive one kind of communication from one type of person about one topic, is desireable, but we cannot assume that such an affective skill means that the intern has acquired all other types of communication-receiving skills. The taxonomy stimulates us to ask whether the training and evaluation process excludes important communication-receiving skills relevant to creating a well-trained intern. The taxonomy is presented schematically in the three dimensional cube sketched on the adjoining page.

The taxonomy demonstrates the high level of affective skills required to receive many types of information. Even when the message has a significant cognative content, the meaning of that content is shaped by the emotional environment. The taxonomy also helps us to understand the differences in the complexity of the jobs of different employees. For instance, compare


MEDIA
Face-to-face
Phone
Mail
Organization manual
Memo
Newspaper
Periodical
Television
Form
Statistics
Book
Other
TOPICS
Personal conduct
Group conduct
Sales
Production
Motivation
Labor relations
Other
SENDERS
Individual peers
Immediate superior
Immediate subordinate
Remote superior
Remote subordinate
Group of peers
Group of superiors
Group of subordinates
Mixed groups of superiors, subordinates and peers
Single customer or supplier
Groups of customers or suppliers
Other individuals
Other groups

communication receiving skills required among different employees at a service station: the gas pump attendant, a mechanic who deals directly with customers with car troubles, and the station manager. Those three jobs represent a progression of communication receiving demands that require job-holders to possess increasingly complex affective skills, as the receivers deal with more diversified message senders, who send messages about more diversified topics and through more diversified media. In all these instances, the theoretical task of the receiver is easy to characterize, (i.e. to perceive the emotions underlying the cognative message), but the task is often hard to carry out, since the receiver's emotions are often simultaneously responding in a spontaneous but sometimes unproductive manner to the message.

The categories of supervision and goals can be equivalently divided, and taxonomies constructed as powerful supportive tools for analyzing affective learning. For instance, we can first identify some theoretical or actual person we consider possessing high affective skills, and then itemize the subcubes of talent he possesses. Then, we can consider a typical entry-level intern, identify the affective skills he probably or actually possesses, and then design a progression of on-the-job learning experiences that will help the intern acquire the affective skills he possessed by our well-trained model. As intern attains proficiency in different subcubes, he will be moved to more advanced stages. The appropriateness of each step of the learning progression can be determined by the taxonomy.

Thus, if we want the intern to become skilled in receiving upper-level supervision, we must determine whether a particular step provides such an opportunity. At the end of the ideal progression, the intern should have passed through enough varied steps to have an appropriate body of experiences and skills.

The taxonomy can also help us to see the affective learning shortcomings of many environments. For instance, if a person works on a job defined by a rigid union contract, he may never have to negotiate with his boss about a wage increase or promotion. This may prevent the worker from being penalized for his ineptitude in bargaining for a raise, but it can also prevent him from learning how to engage in such bargaining. Again, in schools, the interactive demands made on students are limited. They may not have to be supervised by remote superiors, or secure information from subordinates. Finally, even though many suburban adolescents spend long hours on the phone gossip with peers, that is not evidence they know how to interview strange adults over the phone about serious topics. In sum, the more passage of time does not insure the acquisition of a great deal of affective knowledge.

Another virtue of the taxonomy is that it suggests that there is no perfect executive or intern. No human could possess, at a high level, all the skills the taxonomy describes. Of course, some of the skills are clearly quite important, e.g., receiving written directions from remote superiors. Still, we can imagine someone being an able intern even if they could not attain certain goals. In other words, the able "graduate" of the program will have to be evaluated on his total package of skills, and the relationship to the total set of skills portrayed in the taxonomy.

The necessary imprecision of the taxonomy has an important programatic implication. It suggests that the program should have a definite, predetermined length for each intern. The structure followed within this length will vary from intern to intern, and may be changed at the agreement of the parties. But precisely because the end-product will have a degree of obscurity, it may be necessary to insure that at least a substantial amount of time was spent in undergoing these experiences. Still, the intern should never be asked to just put in time during the program. If he acquired all appropriate skills at a modest level before the predetermined end of his training period, his program can be restructured to present him with more exciting challenges in the later stages. Thus, while all interns will attain certain minimum standards, some of them will do more advanced work. Such advanced work will be recognized in greater learning, higher pay as an intern, and higher recommendations from his trainers to other employers.

Attitudes of Employers Towards the System

Employer attitudes towards the system were assessed through unstructured interviews of varied lengths with approximately thirty businessmen and/or persons intimately identified with business concerns, e.g., staff members of businessmen's organizations. About half of the businessmen were assigned to personnel and training-related fields, and were earning between $15-30,000 annually.

The interviewees pointed out many barriers to the efficient operation of the system: as implied earlier, on-the-job training is typically governed by many considerations besides the optimum rate of advancement to promote learning; existing career ladders often do not easily allow for non-college graduates to move into managerial positions, and a significant proportion of existing jobs have high (perhaps excessive) levels of academic requirements. In other words, a college, in contrast to a business, can focus on the progress of its students through levels of learning; such a focus permits the college to enroll students at specified times convenient to the students, expose them to packets of cognative knowledge on a schedule shaped to meet many of their needs, and graduate the students when they have completed their learning . In a business such movements to assist learning are complicated by operational responsibilities. (Of course, on the other hand, it is precisely the existence of the operational responsibilities that creates such a rich environment for affective learning.)

The contrast between learning in school and at work may explain why so many college graduates appear to abandon cognative self-instruction after graduating. Once they leave college, which is highly supportive of cognative learning, they lack the training to continue learning (e.g., via independent reading) in environments that are far less supportive. In contrast, graduates of the proposed system will have been stimulated to learn both cognative and affective skills away from school while they are interns, since they will be stimulated to acquire a good deal of cognative knowledge in order to move to college-level on-the-job assignments in four years. As a result, the ex-interns may be more sympathetic to lifetime learning than many college graduates, who have been operating on the implicit theory -- fostered by college -- that cognative learning is something that happens in school.

Most interviewers agreed that many barriers confronting the system could be removed if adequate resources and planning time was made available. In other words, they accepted the theoretical proposition that modern work could be redesigned, given time and incentives, so that millions of young people could be given valuable training through on-the-job responsibilities. The major area of long-range uncertainty expressed by businessmen was a political one: would the American public, and their political institutions, be willing to make the costly and long-range committment necessary to permit such restructuring? Of course, such objections do not argue against the conduct of a comparatively small experimental program. Indeed, the apparent public and political obstacles strongly argue for approaching the matter experimentally, so the system can be tested and improved, and public opinion may gradually shift if the experimental results warrant.

The businessmen were also highly reluctant to accept resonsibilities under publicly-funded training programs, because of their fears of inappropriate government intervention in internal policies. When they analyzed the high degree of self-policing, market type, controls designed into the proposed system, such arrangements tended to allay much of this suspicion. Still, the initial suspicion handicapped communication.

The businessmen displayed ambivalent attitudes to the question of whether an on-the-job training program, such as the system, even if it were put in operation, could be a large-scale substitute for college. Many interviewees said, during the course of the same interview, that (a) the proposed system was unnecessary, since able high school graduates were not now coerced into college by credentialism, as they were now assured of adequate advancement possibilities on the job, and (b) the proposed system was unfeasible, since they could not conceive of incentives that would ever persuade businesses to place training and personnel development needs before production demands. It was suggested to the interviewees that these two replies were internally inconsistent -- that the able high school graduate, given the current training patterns described, would frequently find his progress significantly delayed by operational requirements inconsistent with his training needs. The interviewees' responses to these questions about their inconsistency were not too clear.

The researchers concluded that the facts (about credentialism and advancement without a degree) are mixed. There are a number of career routes to college level jobs still open to youths with drive and affective skills. However, there is also a growing tendency to question the talents and judgment of any non-college applicant with important career aspirations. Indeed, one contemporary study has already concluded that half of the individual income benefits derived from a college degree may be attibuted to employers of favoritism of degreed job candidates, even when their competing candidates appear to have equal ability.[48] If these business attitudes persist, it is likely that there will be an increased correlation between possessing a college degree and higher lifetime earinings: not because college will have become more relevant to work, but because almost all able high school graduates in the country will feel compelled to attend college to have good job prospects. Thus, we are evolving a self-fulfilling prophecy. But we may reach a point where the alienation engendered by this process becomes too onerous for society to bear.

Some of the businessmen spoke with focus and sincerity about their need for broad-gauged employees at executive levels, but these concerns were not necessarily tied to whether the executives actually had undergone a college education. Furthermore the research data indicates there is almost no correlation between the quality of a graduate's college education (as measured by the academic standing of his college) and his independent adult reading. Thus, it is hard to say exactly how much college graduation had to do with broad vision, and how much a college degree was simply a handy (but not too conclusive) proxy for intellectual talent.[49] We should not ignore the life experiences and job responsibilities that may have affected the perspectives of many interviewees. None of them were familiar with the data about youth alienation recited at the beginning of this report, and there was rarely an occasion to discuss such background in detail. In other words, to their lay perspective, the current education system seemed to be working fairly well. Most of the interviewees had bachelor's degrees. Many of them presumably obtained their degrees through some personal sacrifice. Many of them had also personally committed themselves to getting their children into and through college. However, some of the interviewees had also done post-graduate work. It is significant that the business interviewees most supportative of the system included two businessmen who had doctorates, and a third with a masters and further graduate work at a prestigious university. In other words, interviewees with credentials beyond a bachelors were willing to conceive of the irrelevancy of academically-oriented credentialism; conversely, those persons who had not surpassed the bachelors were inclined to see it as an important test of competency. (It did not seem that the businessmen with extensive post-graduate work depreciated academia per se; they just questioned the relevancy of academic achievements to general business competency.)

Another question asked was: to what extent is formal college training necessary to actually perform the tasks assigned to employees? The answers were rather inconsistent. In part, it is evident that detailed knowledge about the relation between education requirements and skills actually used on the job was often lacking. The answers from the more sophisticated interviewees indicated that the proportion of formal college training use on many jobs (where a degree was typically required) was rather low. One interviewee concluded there was a strong tendency, among many departments in his firm, to upgrade formal academic requirements for new employees, not because these requirements related to jobs assignments, but because upgrading increased the prestige of the unit and justified higher salaries for the staff. Such responses are consistent with the results of an internal survey of a large firm made available to the investigators. The survey analyzed the skills demanded of 700 college-educated engineers in an engineering department. One might assume that such a highly technical field would make intensive use of the employees' formal academic training. However, the survey concluded that only 20-30% of the engineers' work required formal academic training. The bulk of their work (70-80%) was based on job-learned skills.

The preceeding outline of difficulties, disagreements and ambivalences suggest the problems involved in trying to interest employers to propose to participate in an experimental program on comparatively short notice. Unless there are clear signals from the top, decisions on participation would be made on a committee basis in all larger companies. A number of people must have new information and ideas brought to their attention, and would have to consider whether to significantly change their way of doing things. Their incentives for such reconsiderations have been very low during the planning stages of the system. Thus, while businessmen were generous in making their time and counsel available, it was difficult to get commitments for employer participation. However, such non-participation may not represent a definitive or considered judgment on the system.

Attitudes of Youths, Parents and Counselors Towards the System

If the system is to be tried, it is essential that at least a minimum number of youths be willing to enroll. However, large-scale youth interest in the system at this stage is not important, just as large-scale consumer support was unnecessary for the first automobile plant, umbrella factory or college. In effect, the system is based on a forecast about changing opinions about effective socialization. The sucessful small-scale operation of the system might be one such force for change.

To estimate youth interest in the proposed system, a survey research study was conducted in early 1974 of a sample of 96 college-eligible students in the greater Chicago area. Since youth decisions about enrollment will be affected by influential adults in the environments surrounding these youths, parents and high school guidance counsellors were also contacted. (A copy of the final report is included as in the Appendix.)

Forty-six per cent of the youth sample were willing to enroll or were seriously interested in the system. Another thirty-three per cent of the sample said they would "probably not" or "definitely not join the system". Black students had as much, or more, interest than white. Interestingly enough, higher proportions of females (65%) than males (37%) were clearly interested in the system. The investigators were unable to determine the extent to which this pattern of answers on the part of females is shaped by a desire to please the interviewers (and such patterns have been noted in the past among young female interview subjects) as opposed to much greater female interest in on-the-job training. Most high school counsellors were supportive. Parents response was mixed, largely along socio-economic lines. The higher the parents' socio-economic status, the less the support for the system.

The division among youth interest were largely along socio-economic lines. Youths from higher socio-economic families were less sympathetic to the system. This disinclination is evidently based on their long-established predisposition to college; many of these youths said they had formed their college aspirations as high school freshmen. Presumably, these dispositions were the result of their parents' attitudes and vocations. Given such early decision patterns, it is not surprising that they are uninterested in a dramatically different and experimental alternative put before them in their last years in high school.

The survey asked students about their motives for considering the system. Though many were attracted by the possibility of learning while getting paid, they also highly valued learning in a realistic, on-the-job environment. For instance, the students were quite willing to accept lower pay rates if they received worthwhile learning challenges, but wanted assurance that the training would be purposeful and productive. In sum, the students had a responsible and sophisticated attitude towards the proposed system.

It is evident that there is ample youth interest to support a small-scale intern program. In the immediate future, the youths prone to enroll in such an experiment would include high proportions of college-eligible youths who, in any case, would naturally be disposed to go directly to work after high school graduation. In other words, such youths currently believe that college is not responsive to their career needs. The amount of youth interest at this comparatively early stage raises serious questions about current educational arrangements. Under such arrangements, these youths are either driven to attend college against their better judgment, or to accept positions in credential-bound environments. The existing arrangements may represent a serious form of social discrimination.

The Experiment

We recommend that the system be tried on an experimental basis in the Chicago area. The experiment would have a number of objectives:

(1) To test whether interns would be willing to continue in the system and pay tuition over the four year period.

(2) To test whether the employers involved will be willing to maintain the system (by satisfying the interns) over the four year period.

(3) To evaluate the quality of learning received by the interns.

(4) To enable the system designers to improve their design by working on a small-scale, but operating, system.

(5) To endeavor to demonstrate the feasibility of the system

Recruiting and enrollment should occur in the 1974-75 school year, with training beginning in the summer of 1975. The experiment should enroll approximately 20-30 interns. Inland Steel Corporation, a major Chicago area employer and established national manufacturer has made a qualified offer to participate in the system as a cooperating employer. A copy of its statement is attached as in the Appendix.The suceeding section in this proposal discusses the details surrounding the potential participation of Inland and other employers.

The College of Education at Chicago Circle Campus of the University of Illinois should receive a grant and act instead of the state government as the funding source. The experiment should have an evaluation component. As the experiment proceeds, the College and other participants should be prepared to make whatever variations in its structure (consistent with general system) that are required to improve the design of the system. The experiment, from the beginning, should be funded for the full four-year term of the intern's enrollment, since it is unrealistic to expect interns or employers to make in the long-term commitments required by the program if funding agencies are unwilling to make such commitments themselves.

Now, some words about costs. The annual identifiable costs of an undergraduate student at a typical state university in Illinois are $3,300 per year, excluding the costs of school buildings and property. The estimate covers $600 per year tuition, $2,000 as the annual state appropriation (minus real estate costs) per student, and $700 in lost federal and state taxes (since the student is typically not paying taxes while in college). The $2,000 figure is based on annual per student costs at Chicago Circle Campus of the University of Illinois, which has a comparatively low per student cost within the state university system. Using the $3,300 base, we have calculated the total tuition and reimbursement costs of the experiment, assuming that 30 four-year students enter, five drop-out or are discharged at the end of the first year, and 25 continue to the end. Such calculation includes estimating the savings due to employer and student incentives abandoned as a result of discharges and dropouts. (The end-point incentives to students have been set at $1,200; the incentives to employers are set at $2,000 per graduate.) The formula establishes a total payment to employers during the experiment of $300,500. Actually, the per-inter-year costs of the experimental system are significantly less than the $3,300 per-student-year state calculations given above, since the system only pays $3,300 a year on successful completions; the per-intern-year costs on a 30 intern program that goes down to 25 (totalling 105 intern years) calculates out at $2,870 per intern year. If businesses were treated like state universities, with no incentives for completion or the learning of commitment, the total payments to business in the experiment would be $346,500. A budget outlining the total costs of the experiment is shown in the Appendix.

Employer Roles in the Experiment

The letter from Inland Steel is not an explicit commitment. Furthermore, the experiment proposes to enroll 30 interns, while that letter only mentions 15 possible interns.

The fact is that responsible employers are extremely reluctant to pro-offer rather long-range commitments to hire new employees into non-existent programs subject to still undefined conditions. And, speaking frankly, this describes the state of the present proposal. Uncertainties surround the issues of: funding, the amount of funding, the timing of funding, and the conditions attached to the granting of funds.

To confirm Inland Steel's potential offer, and/or to obtain commitment from other employers, it will be necessary for persons with substantial negotiating authority (i.e., the ability to firmly define conditions and commit funds) to participate in negotiations with such employers. This suggests some form of tri-partite negotiating process, involving granting agencies, employers and the College. The exact form of that process will require flexibility from granting agencies as well as employers and the College. If such flexible negotiations begin by June, 1974, the experience of the investigators leads them to believe that employer commitments can be obtained to begin training 30 interns by the Fall, 1975. Presumably, those interns would be recruited during the 1974-75 school year.

The agreement-based system is particularly adaptable to open-ended expansion, i.e., bringing in new employers, even in the experimental stage. For instance, parents, potential interns and counsellors can be given explanatory literature, and can try and negotiate agreements for eligible interns with employers who are not involved in the experiment. The only negotiating element of the basic agreement is that the business and intern must agree on the job outcome they desire, and for the business to state, with as much specificity as possible, how it will move the intern to that point.

The task of any employer (and potential intern) striving to create such an outline will be simplified by the public availability of other executed agreements. Thus, if Company "A" offers an apparently well-designed intern program, potential interns then can ask Company "B" if it can improve on that design. In effect, there will be a built-in means for accelerating the quality of training design. Of course, not all designs are carried out, but high quality in the design is an important step towards high quality in program execution. Depending on budgetry restrictions, the manager of the experiment can bring in such "new" cooperating employers if they file appropriate agreements with acceptable interns, and the interns made periodic payments. As a result, even the experimental system may display the attractive flexibility which has been built in the final version. Such experimental flexibility may greatly increase the nature and quantity of information acquired.

Questions may be raised as to exactly what will the cooperating employers do with their annual payments. Theoretically, they are not accountable for such payments, just as automobile purchasers are not interested in what auto companies do with the money they collect from selling automobiles. However, since this is an experimental (i.e., information gathering) effort, the question is still appropriate. Essentially, the companies will use the bulk of the funds they collect to make accelerated training programs more practicable. The funds can be used to (1) permit subordinate managers to take on more staff (interns-in-training) than justified by their regular operating budgets, (2) hire staff members who explain the objectives and values of the unique program to puzzled employees or union representatives, and thus defuse potential conflict, (3) pay for time lost in meetings at which information about the programs is transmitted to affected employees,

(4) cover the costs of the design and maintenance of the record keeping systems required to track the efficiency of the interns' training, and (5) finance the extra recruiting, selection and negotiating costs engendered by the system.

A word may be appropriate here about the plans for recruiting intenrs. In the final program, recruiting should be the responsibility of employers (with help from school counselors), just as employers now recruit their own staffs, and colleges determine their own admission standards. Employers, if they choose, may even recruit among their own staff, since they are equally as eligible as non-employees. In the experimental program, the investigators may assist in recruiting, since the employers do not now have staff assigned to that purpose, and may not receive money from the program for some time (i.e., until they begin training). Furthermore, the investigators, for a variety of reasons, have acquired contacts and experience that will be of immediate use in recruiting. When a pool of eligible and interested recruits has been identified, they will be put in with potential employers, and invited to negotiate agreements with the employer of their choice. Presumably, some interns will reject some employers, employers will do the same, and some interns will totally reject the program. Apart from legal requirements against discrimination, these decisions will be in the hands of the interns and employers.

Supervising the Experiment

The College of Education of the Chicago Circle Campus of the University of Illinois should supervise the experiment. The following chart outlines a potential scheduling plan for the experiment. The vitae of the proposed principal investigator, Edward Wynne, is in the Appendix. Supervision includes (a) overseeing the organizing and conducting of recruiting, (b) assisting in identifying potential new participating employers, (c) designing and operating a system for managing cash flow, (d) maintaining close contact with the system, especially during its first years, to undertake appropriate revisions in the design, (3) designing and conducting evaluation (the succeeding section discusses evaluation in some detail), (f) encouraging appropriate communication among participants, (g) planning and conducting dissemination, (h) maintaining liaison with granting agencies, and (i) producing a final report.

	MARCH 15 1974	JUNE 1974	SEPTEMBER 1974
YOUTHS	HELP PRE-TEST RECRUITING MATERIAL.		RECEIVE RECRUITING MATERIAL. MEET WITH EMPLOYERS. CONSIDER AGREEMENTS.
EMPLOYERS	REFINING TRAINING PLANS. ASSIST IN PREPARING RECRUITING PLANS.	BEGIN RECRUITING, CONTINUE UNTIL ENROLLMENT QUOTA IS MET. CLARIFY AND CONFIRM TRAINING PLANS.	BEGIN AGREEMENT DISCUSSIONS WITH RECRUITS.
UICC	NEGOTIATIONS ON GRANT. PLANNING, PRETESTING, RECRUITING MATERIALS. FINDING HELP FOR RECRUITING.	GRANT RECEIVED. PRINT RECRUITING MATERIALS. BEGIN RECRUITING.	MONITOR RECRUITMENT AND ENROLLMENT REPORTS TO GRANT AGENCY.
EVALUATION		GRANT RECEIVED. CLARIFY EVALUATION DESIGN.	COLLECT DATA.

NOVEMBER 1974	JUNE 1975	
ENROLLMENTS BEGIN. MAKE DOWN PAYMENT.	PAY PERIODIC TUITION. RECEIVE SALARY. TRAINING BEGINS. →	EARLY QUITS OR DISCHARGE. OTHER JOBS WITH SAME OR OTHER EMPLOYER. FORMAL EDUCATION. OTHER. UNKNOWN.
MAKE SELECTIONS. ACCEPT ENROLLEES UNTIL QUOTA FILLED. FILE AGREEMENTS WITH UICC.	TRAINING BEGINS. RECEIVE PAYMENTS FROM UICC. PAY INTERNS SALARIES.	OVERSEE WORK, TRAINING AND PROGRESS OF INTERNS.
RECEIVE DOWN PAYMENTS FROM ENROLLEES. MAINTAIN PUBLIC FILE OF AGREEMENTS.	MONITOR OPERATION. RECEIVE TUITION, PAY EMPLOYERS.	
	INTERMEDIATE REPORTS.	

JUNE 1977	JUNE 1979	DECEMBER 1979
GRADUATION OF "SHORT TERMERS" BEGINS.	GRADUATION OF FULL TERMERS.	
GRADUATE "SHORT TERMERS."	GRADUATION.	
INTERIM DISSEMINATION. PAY INCENTIVES ON "SHORT TERMERS."	PAY INCENTIVES.	FINAL REPORT DELIVE
		FINAL REPORT DELIVE

Evaluation

The research and evaluation design for the program includes both formative and summative evaluation: summative evaluation findings will assist in self correcting the program and enhance replication; formative evaluation during the experimental phase will assess the impact of the program and predict long-range effects. The vitae of the two evaluators, Schwartz and Csikszentmihalyi, are in the Appendix. A variety of data collection techniques will be used to document the culture of the program and the behavior of the individuals and institutions participating in the endeavor. Interviews, observations, psychological measures, historical documentation, ethnographic techniques and other methods will be negotiated with, and agreed to by, the participants at the entry point into the program to avoid any misunderstanding about the need for ongoing evaluation in an experimental program.

The basic assumption of the program is that the interns will engage in meaningful and rewarding training and maturing experiences more often than college youth, and youth not involved in the program. To verify this assumption comparison groups must be selected. The population from which the treatment and comparison groups will be selected is that group of high school students who evidence interest in the program and meet the criteria for entry. That is, they are eligible for college, are interested in participating in the program, and are not committed to college. Our preliminary survey reveals this group of students may be from 20% to 40% of a junior or senior class depending on the school and the community in which it is located. This population of students will provide our three sample groups:

1. The Treatment Group will include students randomly selected from the population of eligible students who are admitted to the management intern-

ship program, are placed in cooperating companies and interact with program staff on an ongoing basis.

2. The Counseling Group includes students who were not selected for full participation in the program, They were not placed in a cooperating company, but they are offered counseling services by qualified professionals. Some students will seek jobs, others will enter college. They may consult with program staff members regarding job selection problems, career advancement opportunities, college selction and admission, academic problems, etc., during the period of the experiment. Program staff members will contact them on a regular basis to maintain the relationship, but program staff members will not become involved with the institutions these students work in or attend.

3. The Nonparticipant Group includes students who were not selected for participation in the program. They graduate and either find jobs on their own or seek post secondary education. Students in this group will receive no program treatments, except program staff will seek their participation in longitudinal evaluation activities.

Baseline information will be collected on all three groups at the entry point into the program and on an annual basis for the next five years. The chief contrasts to be examined have to do with the differences among the groups in attitudinal changes. The following hypothesis will be examined:

(1) Interns in the treatment group will become significantly more positive toward self and others than individuals in other groups at the end of the first year and the fourth year of the program.

(2) Interns in the treatment group will become significantly less alienated than individuals in the other groups at the end of the first and fourth years of the program.

(3) Interns in the treatment group will become significantly more

willing and able to affiliate with social agencies and to assume responsibility than individuals in the other groups at the end of the first and each successive year in the program.

A variety of psychological instruments will be used to assess the changes and pre and post test comparisons will be made. Interview and observational data will be used to examine and explicate trends in the data. Appropriate statistical techniques will be employed to analyze the data. Three categories of additional but ancillary data are to be solicited. First, baseline demographic information will be established and maintained over the six years of operation. The following questions will guide the collection of this information:

(1) How many interns were recruited by the program? How many were retained? for what period of time?

(2) What were the retention rates for employers, first through fourth year? Are there identifiable variables or critical incidents related to retention across companies?

(3) Which high schools contributed the most interns? those that stayed the longest? What are the common characteristics of such schools? size? program? climate? etc.

(4) What happened to drop outs from the program?

(5) How much money did the average intern earn compared to individuals in the counseling and nonparticipant groups? Average number of raises?

(6) What kind of job placement did interns take upon completion of the program? (A six-month follow-up study of interns is planned.)

(7) What kind of companies in terms of size, service, product

and management style participated in the program?

(8) What were the social, economic and demographic characteristics of the parents who supported the program?

The second kind of data will be historical; a chronology and interpretation of program events. Critical episodes, staff changes, policy decisions, interactions between program staff and companies, examination of documents, changes in the incentive structure for companies, mentors and interns will be documented. Recruitment and selection procedures will be described; communication networks will be documented. Insofar as possible the history of the program incorporating successes and failures, corrections and maintenance functions will be documented so that others who wish to replicate can adapt the program's demonstrably successful activities and avoid those which produced dysfunctional effects.

The third set of data will be ethnographic; a description and analysis of the program's culture, its focal points, its social organization, governance, economic, values, training, etc., and the responses of individuals and agencies to the culture of the program. Observation, participation, and key informant interview methodologies will be used to collect this diverse information which will be examined for patterns, commonalities, uniquenesses and scale of effectiveness. It is this body of information that will answer questions such as those shown below:

(1) What are the responses to the contractual arrangements for interns, businesses, parents and mentors at various points in the program?

(2) Why do the drop-outs drop out?

(3) What kind of an individual makes the best mentor? in what kind of company?

(4) Will the interns possess skills, attitudes and marketability

not demonstrated by individuals in the other two groups?

(5) What program inducements were most effective? Why?

(6) What impact did the interns family, parents, spouses have on the intern?

(7) What rituals, rites of passage and socialization practices were most useful? Why?

These ancillary data should allow the Evaluator to explicate trends in the data related to the three major hypotheses and further to explain any serendipity effects produced by the program.

The design shown above is sketched in the broadest terms and obviously needs greater specifity before it can be operationalized. Staff must be available before the program begins to select instruments, distribute tasks and plot a precise time line. But the basic elements of the design are presented and offer both summative and formative evaluation.

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APPENDIX

OVERVIEW OF TENTATIVE SIX-YEAR BUDGET
(without Indirect Costs)

Budget Item	Year I 1974-75		Year II 1975-76		Year III 1976-77		Year IV 1977-78		Year V 1978-79		Year VI 1979-80		Totals
Staff Salaries	% Time		% Time		% Time		% Time		% Time		% Time		
One Director	100	$23,230	50	$12,250	50	$12,800	50	$13,440	50	$14,100	50	$14,800	$ 90,620
One Liaison **at $15,00**	100	15,000	50	7,875	0	-----	0	------	0	------	0	-----	22,875
One Evaluator	50	8,000	50	8,400	50	8,820	25	4,625	50	9,700	50	10,185	49,730
Admin. Asst.	100	9,000	50	4,725	50	4,750	50	5,000	50	5,250	50	5,575	34,300
Sub		$55,230		$33,250		$26,370		$23,065		$29,050		$30,560	
University Fringe Benefits		$ 7,566		$ 4,555		$ 3,612		$ 3,159		$ 3,979		$ 4,186	$27,057
Payments for Internships (30 Interns for 75-76; 25 Interns next three years)		------		$ 66,000		$ 55,000		$ 55,000		$125,000		-----	$301,000
Communications		900		900		900		900		900		400	4,900
Dissemination		1,000		1,000		3,000		3,000		1,000		1,000	10,000
Travel		2,000		2,000		1,500		1,500		500		500	8,000
Materials & Supplies		2,000		----		----		----		----		-----	2,000
TOTALS		$68,696		$107,705		$90,382		$86,624		$160,429		$36,646	$550,482

INLAND

INLAND STEEL COMPANY

March 8, 1974

Professor Edward Wynne
University of Illinois at
Chicago Circle
Box 4348
Chicago, IL 60680

Dear Professor Wynne:

In reply to your request, the Inland Steel Company is interested in the proposed Management Internship Program as we believe that high school graduates interested in careers in business should have attractive alternatives other than having to complete four years of college before being considered for a management training program. For many years, our Company has followed a policy of promotion from within. To implement this policy we conduct high school and college recruiting to attract graduates into on-the-job training programs. Your proposed program fits in well with our concept of recruiting well-qualified young people directly from school and providing them with training and development opportunities that will enable them to move up the promotional ladder.

The three fields in which it would be easiest for us to establish internship programs are manufacturing, sales and finance. For example: A qualified high school graduate could begin his internship experience in a clerical position in a sales service department. After he gained sufficient experience, he could move into a customer service trainee position and eventually qualify for a job as a customer service representative. From the customer service representative level, promotional opportunities can lead to a wide variety of positions, depending upon interests and abilities, including outside sales representative, customer service supervisor, or to other supervisory or administrative positions in any area of the Sales Department. Employees who come up through the customer service route also may have an opportunity to move into management positions in areas such as production control,

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purchasing, and traffic. A well-motivated young person with sufficient basic ability could move up to the type of job usually filled by a college graduate after two to four years of job experience.

If we participated in a Management Internship program, we would develop a specific training program which would include orientation training, on-the-job training plus job rotation to provide the intern with the type of exposure and experiences he would need to qualify for higher level positions. The rate of upward mobility of the intern would depend to a large extent upon his own job performance. We would also see to it that he received good supervision and career counseling as needed. We would also encourage the intern to continue his education at night by taking college-level courses related to his job objectives under our Tuition Reimbursement Program.

Although we are interested in the possibility of participating in the type of Management Internship Program described in your proposal, it should be understood that a final decision to participate would depend upon a number of factors prevailing when the proposed funds are definitely available. These factors include our employment needs at the time the program is put into operation, the extent of red tape restrictions which may become part of the program, and whether we would be reimbursed for any abnormal training or counseling expenses that may result from the program. The proposed payment to employers (of about $3,000/intern year) will probably meet such costs.

If we participate in the program at Plant locations where we have collective bargaining agreements, interns working in jobs covered by the labor agreement would have to be governed by the provisions of these agreements in the same manner as other employees.

If the proposed Management Internship Program becomes a reality, we would be glad to sit down with the program administrators to further explore how this program might be put into operation at one or more of our Chicago area plant locations. Without knowing the final provisions of the program, it is our best estimate at this time that we would be able to accommodate about 15 interns.

Sincerely yours,

George J. Yoxall
Assistant Director
Personnel and Training

GJY/ncr

MANAGEMENT INTERNSHIPS SYSTEM

Report of Briefing Team

February 15, 1974

YOUTH AND PARENTAL ATTITUDES

Mihaly Csikszentmihalyi

The University of Chicago

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Purpose of the Survey

Because of the novel features of the Management Internship system, it was necessary to sound out prospective clients in order to determine their willingness to participate in it were the plan to become operational. To this effect, groups of high school students, high school career counselors, and parents of students were interviewed.

It is of course difficult to get a valid report of attitudes concerning a system that is not yet existent. To make the interviews as realistic as possible, each respondent was given in advance a two-page description of the Management Internship system, so that they would become familiar with its main points. The subsequent interview was based on this shared knowledge about the goals of the plan.

The student sample

Ninety six high school students were interviewed; all were judged by their school counselors to be of college caliber; exactly half were in the top quartile of their class, while the other half were in the second quartile. Thus none of the respondents fell below the scholastic average of their respective schools.

Forty-five percent of the sample were students at three suburban high schools; 36 percent came from three South-west Chicago schools, and 19 percent were students at one North-side Chicago school. All schools are public, and serve a diversified population in terms of cultural background and socioeconomic standing. Seventy-two percent of the respondents were male, 28 percent female. Forty-five percent were seniors in high school, 55 percent were juniors. Ten percent were Black and 90 percent Caucasian.

1. Interest in joining the program

The main purpose of the survey was to determine whether students would be in any way attracted to the program if it were in operation. The source of information bearing on this issue is question 1 on page 4 of the interview schedule (see Appendix), which reads: "Do you think you might want to join such a program, if it were in operation?" The answers are reported in Table 1.

TABLE 1

Reported willingness of students
to join the Management Internship plan

	Number	Percent of Total
Definitely yes	13	14
Probably yes	31	32
Undecided	20	21
Probably not	24	25
Definitely not	8	8
	100	100

Even considering that the "yes" response figures may be inflated by the students desire to cooperate with the interviewer, it is encouraging that 46 percent of the respondents showed a positive attitude towards the program, and only 33 percent were against it.

It was possible to find out in some detail which characteristics predispose favorably towards participation. For instance, 65 percent of all female students gave a "yes" response, while a relatively low 37 percent of the males did. This difference may be due either to the girls' desire to appear more cooperative, or to a genuine interest on their part in the opportunity for meaningful job training. Six out of the ten Black students gave a "yes" response. Three were undecided, and one was uninterested.

Predictably enough, fathers' occupation makes an important difference in whether the students would consider joining the program (Table 2). Only one fourth of the students whose fathers are in the top two classes on Warner's occupational rating scale say they would consider joining the program, while a full 88 percent of the children of fathers in classes 5, 6, and 7 would want to join. The probability of such a difference occurring by chance is approximately one in a million.

TABLE 2

Percent of students wanting to join program,
by Fathers' occupational status

Fathers' Occupational Rating (Warner, W. L. Meeker, M., and Eeels, K. Social Class in America, Chicago-SRA, 1949, 121-59)	Number	Percent responding		
		Definitely or Probably yes	Undecided	Probably or Definitely not
1 and 2 (Professional and manager)	26	23	15	62
3 and 4 (White collar and small business)	26	58	12	30
5, 6, and 7 (Skilled worker, service and unskilled)	37	79	16	5
	89			

Similarly, 60 percent of the higher occupational group was disinterested in the program, but only two students from the lower occupational groups were uninterested. Another finding of the same nature is that the chance of a student being interested in the program is much higher if he or she comes from a family without a history of college attendance (Table 3).

Two-thirds of the students who came from families where no one had finished college were for the program, while approximately the same proportion were against it among students who had close relatives completing college.

TABLE 3

Percent of students wanting to join program, by previous college attendance

		Percent responding		
	Number	Definitely or Probably yes	Undecided	Probably or Definitely not
No member of family completed college	55	65	20	15
One or more members completed college	41	20	20	60
	96			

Another variable that relates to the willingness to join the program is academic class rank. Thirty-two percent of the students in the top quartile of their class said they were interested, 45 percent said they were not. The figures for students in the second quartile were 55 and 25 percent, respectively.

Hence one might say with a certain degree of confidence that young people most likely to be interested in the program, at least in the beginning, will be from a lower socio-economic class, with no previous college experience in their families, who will tend to be above average but not outstanding academically. This, of course, includes a large segment of the youth population, and one would expect to attract other kinds of students if the program was successful.

The reasons why about one-third of the sample refused to consider the Management Internship option are not difficult to find. Of the 32 students who said they would not join, 89 percent had already decided to go to college, while the remaining 11 percent were planning to travel—none were considering work after graduation. A full 86 percent of these students had decided on college by sophomore year in high school; an even half were sure of college while still in grammar school. Asked why they had opted for college, 37 percent responded that they had always assumed they would eventually go, and 34 percent said college was a necessary step for the careers they had planned.

Clearly many youngsters declined the Management Internship alternative for good reasons; others did it without much thought, simply because it conflicted with college, which they took for granted to be the only possible next step in their lives. Of course, it is impossible to estimate what the decisions of such youths would be if Management Internships were presented to them as an alternative at a much earlier stage in their lives, e.g., while they were high school freshmen.

2. Evaluation of the program

Many questions were addressed to the students in order to find out why they might join the program or why they might decline to do so, which features they liked best and which they disliked, and so fourth. Here we shall report only a few of the most informative facts that emerged from the investigation.

Asked what they considered to be the best and the worst features of the program, the answers fell into the categories listed in Table 4, shown on the next page.

The chance of making money, and of learning while doing so, were the obvious leaders on the plus side of the program. Interestingly enough, over a fifth of the respondents could think of no features they disliked. Those who did voiced a variety of relevant reasons, including lack of interest in a business career, or a lack of assurance about presence of future interests.

A slightly different picture emerges when one looks at the features which a student would consider important in deciding to join a specific firm.

TABLE 4

General attitues toward the program

Percent mentioning feature	Features liked best	Percent mentioning feature	Features liked least
36	Opportunity to make money while working at meaningful job	22	None
		20	Program will be a waste of time if interests change; lack of a degree
32	Learning while on the job		
18	No unnecessary study, no waste of time	16	No interest in a managerial career
10	Realistic learning experience, being in the "real" world	15	Miscellaneous
		11	Requires too much commitment
3	Miscellaneous		
1	None	10	Program too limiting with respect to varied interest
		5	Doubts about job opportunities after internship
		1	Restricted social interaction
100		100	

When asked: "What would be the most important thing that would make you decide to join the program in a particular company?" the answers broke down as in Table 5.

TABLE 5

Most important features of company plan

31 percent	said that the deciding factor was how much they would learn while in the program,
31 percent	emphasized that what counted was whether the job was interesting,
28 percent	said it would depend on the opportunities for advancement,
5 percent	stated that money was the crucial issue
5 percent	gave other reasons.

Whereas the opportunity to make money while in training was the favorite feature of the plan in general (Table 4), financial considerations was the least important factor in the decision to join a specific company (Table 5). Students are saying that they would choose a company more on the basis of what they could learn, how interesting the job was, and how much potential the job had, rather than on the basis of remuneration. This distinction suggests guite a sophisticated attitude on the respondents' parts.

An even more specific pattern is shown by the data in Table 6, which lists answers given to the question: "If you were seriously thinking about joining the program tomorrow, what more would you want to know about it before signing up?" (Table 6 shown on next page.)

TABLE 6

Issues needing clarification
before students decide to join program

Percent of total sample mentioning	Item	Percent of total sample mentioning	Item
43	Interest in job	17	Salary while training
38	Opportunites for advancement	11	Size of firm
28	Flexibility of program	11	Personality of the mentor
28	Salary after training	10	Personality of co-workers
24	Extent of experience gained though program	9	Location of firm, hours, etc.
21	Identity of the firm	7	Fringe benefits
20	Security	7	Miscellaneous

Table 6 provides a reasonably clear picture of what information a firm would have to provide in order to convince a person to join the program. The kind of things students are most worried about are quite realistic: Will the program give them the same chance for advancement as a college degree would, or will they be stuck in a junior position for lack of credentials? Is the program going to give them a chance to do interesting work, or do only people with college degrees get interesting jobs? Is the program going to be flexible enough to let them learn a variety of skills, and are these skills going to be useful in other occupations of the intern decides to leave the company? These are the main concerns voiced throughout the interviews, and they lead the list of answers presented in Table 6.

In addition to these open-ended questions, respondents were asked to rate 13 specific features of the program in terms of whether they thought the feature was "very valuable," "indifferent," or "not valuable" (p. 6 of Interview schedule in the Appendix of this report). Table 7 ranks the 13 items in order of preference.

While all items but one received a positive ranking on the average, a clear order of preference is shown in the table. Students rank highest opportunities for advancement, varieties of job experiences, and the presence of a "mentor" in the firm. Then students list opportunity for flexibility Next there is concern with mutal commitment.

(Table 7 on following page)

Less value is attached to the bonus, to the idea of interns starting at the bottom of the occupational ladder, and to the parents' involvement in the program. Finally, the least valuable feature ranked was the ritual attendant to the signing of the agreement.

3. Conclusions

The results show that a large percentage of high school students may be interested in the program. The kind of person who is most likely to want to join is one capable of being admitted to college, but lacks the social class values, the educational precedent, and the outstanding academic record which make college the obvious choice.

Of course, favorable attitudes towards the program do not guarantee that a large number of students will actually want to participate in it once it is established. Still, if even one fourth of the 45 percent who favored the program were to be seriously interested, that would mean a pool of potential candidates of the order of 10 percent out of the upper half of each graduating class. The data also means that significant proportions of high school graduates either attend college "under sufference", or are deprived of substan-

TABLE 7

Ranking of program features
(1 = very valuable, 4 = not valuable)

Items	Mean Rank
h. After four years they (the interns) have the option of being hired at a higher level than a college graduate	1.24
g. During the apprenticeship, interns are exposed to as many different jobs as possible.	1.27
c. The "mentor" will be likely a personal friend in helping and advising interns	1.34
m. The Federal Government should back this program and make it official	1.57
e. Programs should be of variable length--some 2, some 3, some 4 years in duration	1.67
k. The program is widely advertised so that it has as much "status" as a college degree	1.74
a. An agreement provides moral obligation for the company and the intern to go through with the program	1.97
b. The bonus at the end of internship will constitute an inducement to finish the program	2.09
i. Interns will start at the bottom of the company for the first year, doing the simplest jobs	2.70
d. Parents will also sign the agreement for the four-year program	2.80
f. The signing of the agreement takes place in an informal ceremony with parents, friends and company officials present	3.00

tial state financial assistance in attaining away-from-college learning experiences.

The main questions from the students' point of view are whether the program will give them an interesting job to do, whether there will be a chance for advancement within the firm comparable to that of a college graduate, and whether the training will be transferable so that an intern will not feel trapped in the one firm he first joined. The students are not opposed to commitment, but they want to be free to transfer to other careers in case their interests change. It seems that any program that aims to attract valuable young people must find a way to reassure them on these points.

Factors which will influence students' decision include the attitudes of other people in their environment. Although young people deny this, parents still wield strong influence in the choice of future career. Peer pressures must also be considered. And finally, career counselors in high schools can have an important role in exposing students to a variety of options. Therefore, we shall now turn to some of these other sources to see what were their reactions to the program.

Career Counselors

All the counselors in each of the high schools were interviewed. They were all favorable to the plan, some enthusiastically, some with reservations. they all said they would help with recruitment, and they gave specific advice on how to advertise the program and reach potential candidates.

As with students, the enthusiasm of the counselors seemed to vary inversely with the academic standing of the high school. But even at one of the suburban schools the counselor estimated that 10 percent of the graduating class might be interested.

All of the counselors reported a decline of applications to college in the current year, and a revival of interest in more "practical" choices. This trend is one of the main reasons for their support of the plan, although some also had strong ideological reasons for liking it, such as "I have told this to students for over twenty years. . . . It's wonderful to be trained by top men in top companies. It's better than classroom theory."

Counselors were somewhat divided in their assessment of parental influence on their children's choices. Those from the suburbs felt that parental approval and commitment were necessary, but the ones from the lower-middle class sectors thought that peer example was a more powerful determinant than parents' advice. Both counselors from the academically first-rate North Side school, on the other hand, felt neither parents nor peers were the main issue, but that one must convince the students themselves that it was in their best rational interest to join the program.

Rather than trying to further summarize the counselors' responses, we reproduce below two interviews that give a range of the opinions encountered. In general, it can be concluded that there will be no problem in securing the cooperation of guidance departments at high school. Counselors seem ready and willing to help recruit candidates, and to suggest recruitment strategies which are appropriate to the socio-cultural mix peculiar to each school.

Career Counselor, Mather High School (mixed population, city school)

IN GENERAL, WHAT DO YOU THINK ABOUT THE PROGRAM?

I think this a very good idea. My husband has a work program at Amundson High School. I have worked in offices and I know college isn't necessary for a lot of jobs. I'm familiar with business management. College can be frustrating to some students. They take courses not for a job and have no skills and have to take positions (like Chemistry, you could use it, but Social Studies not) that have nothing to do with the things you have to take in high school. My daughter has a friend who took French and now manages a motel. A degree in French seems like a waste.

IF THERE WERE A PROGRAM SUCH AS THIS DO YOU THINK THERE ARE STUDENTS WHO WOULD BE INTERESTED IN IT? WHAT TYPE OF STUDENT? HOW MANY?

Yes, there are. I was just talking to a girl today and she's afraid to take some courses like Chemistry. With this they wouldn't have to take classes they're worried about. From feedback I get from the kids--like University of Illinois Biology is a flunk out course...If they didn't have to take it...If it's good for them or not is another story. The type of student would be the ones who don't have definite career plans and not an outstanding student, an average student, let's put it. Not for the ones thinking of professions. I think their families would approve of a college-approved plan. It would be like going to college. How many? It's hard to say. I really wouldn't know. I would have been interested. College was very expensive. It was the end of the depression and money was hard to get. Before 85% of our students went to college and I guess now 65% will go. A definite drop in kids going to college. They're planning to work full time. Maybe 10% would be interested. I don't know.

IF THERE WERE A PROGRAM SUCH AS THIS WHAT WOULD BE THE BEST WAY TO ADVERTISE OR LET THE STUDENTS KNOW ABOUT IT?

Best thing to do is invite them to the University of Illinois and see the campus and have people speak to them there. Like an open house. Alot would have to do with what companies are sponsoring it too. Some names are more important. Small companies people don't know about but a company like Proctor and Gamble people may be more interested in. On our college night we invite industries to talk to the people or give each student a flyer on it. Something they can read and their parents can read. Let the counselors know and we would give the information.

IN YOUR EXPERIENCE, WHO OR WHAT IS MORE INFLUENCE IN CHOOSING? WOULD IT BE PRESSURE OF PEERS, MEDIA, PARENTS OR COUNSELORS?

If you could get a few students interested their peers are more influential than parents and counselors. We see this with college. They want to go where their friends go.

IF THE PROGRAM IS TO BE AVAILABLE, SHOULD THE PARENTS KNOW ABOUT IT OR IS IT MORE UP TO THE PEER GROUP? WHO OR WHAT DETERMINES?

If it's available I think the parents should know about. The student would have to want it. No matter how much the peers or parents want it I think it should be up to the individual. This would be a wonderful chance. I like it. If it would be sponsored by a good school and I felt the companies were good, I'd recommend it. There are a lot of details that will have to be ironed out, but I have no questions.

Career Counselor, Maine Township High School North (suburban school)

IN GENERAL, WHAT DO YOU THINK ABOUT THE PROGRAM?

I am all in favor. We have been looking for something like this. I think the student body and the parents would hesitate. Parents are geared to the past, thinking of a traditional college training for their kids.

IF THERE WERE A PROGRAM SUCH AS THIS DO YOU THINK THERE ARE STUDENTS WHO WOULD BE INTERESTED IN IT? WHAT TYPE OF STUDENT? HOW MANY?

Some students in the business area may have interest. Kids are being turned off with education and sciences. They are looking for something in business area. The trend is definitely going toward this. About 1/10 of the senior class or 1/10 of the whole school may show interest in this program. Lots of business students are concerned with this career. Lots of kids that were interested in other areas are now thinking of a business career.

IF THERE WERE A PROGRAM SUCH AS THIS WHAT WOULD BE THE BEST WAY TO ADVERTISE OR LET THE STUDENTS KNOW ABOUT IT?

Mass communication to advertise--by newspaper where parents and students could read about it. Parent-teacher associations may do something. They try hard and are always willing to help. If a representative came to the schools, set up meetings I know our school would be very happy to cooperate. This could be opened up to the entire student body or special classes.

IN YOUR EXPERIENCE WHO OR WHAT IS MOST INFLUENCE IN CHOOSING? WOULD IT BE PRESSURE OF PEERS, MEDIA, PARENTS OR COUNSELORS?

Kids are influenced by their peers. Parents may start them thinking but I don't think they follow in the parents' footsteps any longer. I feel their peers have more influence, at least I have found this so.

Parents should be involved in it. As a parent I am always interested in what my kids are doing. I like to be involved with my children and I think most parents feel this way.

Parents

Compared to students and counselors, reaching parents was a more difficult task. Fifteen parents of students at the various high schools were eventually interviewed, and their responses begin to give an idea of what kind of reception the program might receive from that quarter.

In general, all the parents felt that the plan was a "good idea," a "fine opportunity." However, all upper-middle class parents felt that it was not for their children. As one mother put it, "higher education is part of my cultural heritage. I don't see college as being really vocational. It is a broadening experience--*it's something you ought to do for them* (italics added). If they are capable, you can provide them with this experience." In other words, parents who themselves went to college or attained upper-middle class status felt they owed it to their children to put them through college.

The other main reason these parents denied interest in the program for their own children was that they had already decided on a professional career for which college was a prerequisite. Or, as another mother put it, "if a youngster is geared toward college, nothing will sway him."

Upper-middle class parents felt the program would be excellent for students who cannot afford college, who aren't interested in academics, who "have a good head for business," or who are not of college calibre. It is clear from these responses that parents in the higher socio-economic classes will not support actively the program for their children, at least initially. For better or worse, they have internalized the cultural values attached to a college education.

To get the active cooperation of this group, it appears necessary to demonstrate that the Management Internship plan is not a second-best option, but that it can open as many doors to future advancement as college does. Probably much opposition would be avoided if the program is able to include some academic component, such as a junior college degree.

Parents of students from the predominantly upper-lower and lower-middle class South-west Side had few reservations about the program, and in general would have liked their children to participate in it. The problem here is that these parents have a pessimistic view about their ability to affect their chilren's choice. This lack of interaction was confirmed by both the students' and counselors' responses. The counselors all agreed that "our students relate to their peers and there is very little communication at home, or for that matter, with us."

In a typical high school of this neighborhood, four years ago 53 percent of the graduating class went to college or junior college, but only 12 percent graduated from such institutions on time. Presently the rate of college applications is much lower. Those who do not go to college or drop out of it will become apprentice plumbers, electricians or construction workers. How to reach this large group that contains many valuable candidates will be a problem. The help of parents, while available, will not make much difference in this case.

Summary

The main advantages students see in the Management Internship system is that it provides training with pay, it promises at least equal chances for advancement as a college degree, and offers an opportunity to work in a "real-life" setting.

A large proportion of high school students are not interested in the system because they already have made a career choice which entails a college degree, or because of disinterest in business and management.

An even larger proportion, or 45 percent of the students interviewed, said that they might want to join the system. These tended to be young people from families without prior college experience, from the lower middle class, and from the second quartile of their school class.

The major concerns voiced about the program covered the following points: 1) Would the job be interesting? 2) Would an intern advance in the firm as fast as a college graduate? 3) Would the learning be transferable, so that an intern could move from one company to another if his interests changed, and not feel trapped in any one firm?

It seems clear that if the program were able to give positive answers to these three questions, most of the reservations would evaporate.

The social class polarization appears to be even stronger among parents. Middle class parents tend to see college as a necessary prelude for full adult status, at least as far as their own children are concerned. Parents from less advantaged groups would support the program, but they seem to have little influence on their children's choices.

High school career counselors responded very positively, offered their assistance in recruiting, and gave valuable advice on reaching students. With the information at hand, it should already be possible to start a successful recruiting drive.

In conclusion, it seems that there is a potentially large demand for this kind of plan. But to attract the kind of students for which it was designed --the ones who could be successful in college--the plan will have to be convincingly competitive.

APPENDIX
Mihaly Csikszentmihalyi Report

Interview Schedule

INTERVIEW SCHEDULE

Preliminaries

1. Introduce yourself: name, affiliations.
2. Explain purpose of interview: a) opinions about Management Internship plan;
   b) career plans in general.
3. Any questions? Try to make sure that interviewee feels at ease.

PART I

1. You are about to finish high school. Have you given any thought to what you will do after graduation?

2. If you could do anything you wanted, what would you do after graduation from high school? Don't worry about being realistic, just say what you really would like to do if you had all the choices in the world.

   a.

   b. (Rank as many as mentioned, in order of perference)

   _____College
   _____Travel abroad
   _____Do nothing for a while
   _____Get married
   _____Join a commune, rock band, etc.
   _____Become an artist, athlete, etc.
   _____Start own business
   _____Joined armed services
   _____Work for a company
   _____Work for father or relatives
   _____Work for government
   _____Work on a farm, as a forest ranger, etc.
   _____Other (specify)

   c. What would you like to be, when you are thirty years old?

3. What do you expect you will actually do after graduation from high school?

a.

b. (Rank as many as mentioned, in order of probability)

______College
______Travel abroad
______Do nothing for a while
______Get married
______Join a commune, rock band, etc.
______Become an artist, athlete, etc.

______Start own business
______Join armed services
______Work for a company
______Work for father or relatives
______Work for the government
______Work on a farm, as a forest ranger etc.
______Other

c. What do you expect to be doing, when you are thrity years old?

d. How much money do you expect to be making a year by age thirty?______________

4. a. Have you asked anyone for advice about your future after high school?

Yes______ No______
Father______ About how often?
Mother______ What was the advice?
Other relatives________
Friends________________
Girl (or boy) friend_____
Career Counselor________
Employer________________
Other___________________

b. Did anyone offer you advice about your future after high school?

Yes______ No______

5. Who do you think could give you the most useful information about your future?

6. Have you decided what you will do after graduation?

Yes______ No______

a. What have you decided to do?

b. When did you make your decision?

c. How did you come to make this decision?

d. What other person was important in helping you to make the decision?

7. Have you made any definite plans for after graduation:

a. Yes______ No______

b. (Circle appropriate person(s). Inquire when, and what results.)

Talked to father
- mother
- other relatives (specify)
- friends
- girl friend
- career counselor
- parents' friends
- employers

Took college entrance exams (specify)
Wrote for college application forms
Completed college applications
Visted colleges
Was accepted into college
Other

PART II

1. Have you read the plan for Management Internship?
(Show S. the plan. If he hasn't read it, give him time to do so).
Do you think you might want to join such a program, if it was in operation?

    1. Definitely yes — a. Why?
    2. Probably yes
    3. Undecided
    4. Probably not
    5. Definitely not

2. (if answer above is 3, 4, or 5): Is there any change in the plan that would make you reconsider your decision?

3. (if answer above is 1 or 2): Would you still join the program even if it was not widely known, and involved only 4-5 companies and a few dozen interns?

    b. Would you still join if you were paid only
    70%
    60% of an intern's salary
    50%
    40%
    (e.g. 80% of $6000 a year)?

    c. What would be the most important thing that would make you decide to join the program in a particular company?

4. What is your strongest objection to the plan?

5. What is the thing you like best about the plan?

5. If you were seriously thinking about joining the program tomorrow, what more would you want to know about it before signing up?

a.

b. (Check those mentioned, and use for probing. Rank in order of importance)

While intern

______Salary while intern
______Size of company
______Interest in job
______Extent of experience provided
______Flexibility of program
______Personality of co-workers
______Personality of mentor
______Other

After internship

______Salary after training
______Opportunities for advancing after internship
______Security
______Fringe benefits
______Interest in job
______Other

6. In your opinion, what is the value of the following features of the plan:

	very valuable	moderately valuable	indifferent	not valuab
a. An agreement provides moral obligation for the company and the intern to go through with the program.				
b. The bonus at the end of internship will constitute an inducement to finish the program.				
c. The "mentor" will be like a personal friend in helping and advising interns.				
d. Parents also sign the agreement for the 4-year program.				
e. Programs should be of variable length: some 2, some 3, some 4 years in duration.				
f. The signing of the agreement takes place in an informal ceremony with parents, friends, and company officials present.				
g. During the apprenticeship, interns are exposed to as many different jobs as possible.				
h. After four years, they have the option of being hired at a higher level than a college graduate.				
i. Interns will start at the bottom of the company for the first year, doing the simplest jobs.				
j. Interns have the opportunity to study for a 2-year junior college degree while apprenticing				
k. The program is widely advertised so that it has as much "status" as a college degree.				

7. a. Did you discuss this plan with anyone?
   b. If yes, with whom?
   c. What was their reactions to it?

8. Do you have any comments about this plan that we have not covered?

PART III

1. Age_____ 2. Sex__________ 3. Grade: Junior_____ Senior______ 4. School_________

5. What is your approximate rank in class:

	Mathematics	Humanities	Sciences	Phys. Ed.	Over-all
Upper $\frac{1}{4}$					
Second $\frac{1}{4}$					
Third $\frac{1}{4}$					
Lowest $\frac{1}{4}$					

6. What does your father do? (Be specific)

7. Do you have any brothers and sisters?

	Older	Younger
Brothers		
Sisters		

8. Did any of your close relatives complete college?

Father____________ Brother(s)_________

Mother____________ Sister(s)__________

Is any member of your family enrolled in college now?______________

9. Which of the following best describes the cultural background of your family:

Anglo-Saxon Protestant__________
Irish Catholic__________________
European Catholic_______________
European Protestant_____________
Jewish__________________________
Spanish-American___________________
Afro-American______________________
Oriental___________________________
Mixed (indicate which)_____________
Other______________________________

10. a. Have you ever worked full time? Yes_______ No________

    b. If yes, what was the job?

    c. About how many weeks did you work full-time, altogether?_______________

11. a. Did you ever hold a part-time job? Yes_____No_____

    b. If yes, what was (were) the job(s)?__________________________________

    ____

    ____

    c. About how many weeks of full-time work did it all add up to?____________

12. Have you ever had to supervise people either on the job or elsewhere, (e.g. directing a play, coaching a team, etc.)?

13. Did you ever lead people in any situation (e.g. Boy Scouts, neighborhood gang, athletic team, etc.)?

14. Do you belong to any formal or informal organization:

15. Are you an officer in any group?

VITA

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Significant Employment

1. Associate Professor of Education (Sociology) September, 1970 to date. College of Education, University of Illinois at Chicago Circle.
2. School of Education, University of California, Urban Education Program. Research Assistant, December, 1968-September, 1970. (Concurrently on U. S. Office of Education Research Fellowship).
3. U.S. Office of Education. Special Assistant to the Director, National Teacher Corps; Special Assistant to Director, Follow Through.March, 1966-September, 1968.
4. Office of Economic Opportunity. Director of Recruiting, Job Corps; Special Assistant, Inspector General - November, 1964-December, 1965.
5. Associate General Counsel, Textile Workers Union of America, AFL-CIO. September, 1960-February, 1964.
6. Attorney, National Labor Relations Board July, 1958-August, 1960.

Publications

BOOKS

The Politics of School Accountability: Public Information About Public Schools (Berkeley, Ca. : McCutchan, 1972).

Editor, with James W. Guthrie, *New Models for Public Education* (Englewood Cliffs, N.J.: Prentice-Hall, 1971).

ARTICLES, ETC.

"Socialization to Adulthood. Different Concepts, Different Policies." *Interchange*, V.4. No. 4 (Spring, 1974).

"How Should We Teach the Priviledged Child?" *The PTA Magazine*, October, 1973.

"Can Suburban Kids Really Grow Up?" *L I*, September 16, 1973.

"The Facts of Life for Affluent Kids." *Wall Street Journal*, June 4, 1973.

"Get Better Ideas Afloat to Improve Urban Education," in *Rethinking Urban Education*, ed. by Herbert Walberg and Andrew Kopan (San Francisco: Jossey-Bass, 1972).

"Education and Socialization: A Complex Equation, "Educational Researcher, (December, 1972). Reprinted in Social Issues in Education, ed. by William M. Cowe (New York: MacMillan, 1974).

"Policies to Help the Young Grow Up," Statement presented to a subcommittee of the Platform Committee of the Republican National Convention, Miami, Florida, August 14, 1972.

"Student Unrest Reconsidered," Phi Delta Kappan, October, 1971, reprinted in Crucial Issues in Urban Education, ed. by Theodore H. Hipple, (Pacific Palisades, California: Goodyear, 1973).

"Heart and Mind Together," Education and Urban Society, May, 1971.

"Educational Research, A Profession in Search of a Constituency," Phi Delta Kappan, December, 1970.

"On Mentorship," and "Output Measures to Change School Goals," in New Models for Public Education.

"School Output Measures As Tools for Change," Education and Urban Society, November. 1969.

Contributor, "Symposium on Evaluating Educational Programs," Urban Review, February, 1969.

"A Parents Group Shows How to Evaluate and Change School Policy," Phi Delta Kappan, January, 1969.

"How to Measure a School's Performance," American School Board Journal, August, 1968.

Publications in Preparation

The First Revolt--Against Post - Industrial Society. A book considering youth unrest as the product of the unique (and dysfunctional) maturation system which surrounds contemporary upper-middle-class youths

Suburban Children and Their Schools. A book on the issues confronting suburban education. More families live in suburbs than any other area in America. The absolute numbers and proportions of these families will be increasing.

Professional Activities

Member, American Education Research Association

National Coordinator, Network for Better Education
Sponsor, Chicago Pro-seminar on "Policy Implications of Youth Unrest"

Education

Graduate: School of Education, University of California, Berkeley (November, 1970). Ed.D. in educational planning, with emphasis on sociology, education history, political science.

Brooklyn Law School, June, 1954.
Top Quarter, Member of the School Moot Court Team.

Undergraduate: Brooklyn College
(No B. A., attended only 3 years)

VITA: Henrietta S. Schwartz

Current Position: Associate Professor, Director of Administration and Supervision Program, Roosevelt University College of Education

Education:

B.S.E., English, Speech and Drama, Northern Illinois University, 1950
M. Ed., Educational Administration, Loyola University, Chicago, 1966
Ph. D., Educational Administration, University of Chicago, 1972
Other training: 60 hours of graduate work in Anthropology, Northwestern University, Evanston, Illinois, 1954-62. 50 hours of graduate work in Theatre Arts, Goodman Theatre School and Northwestern University, 1951-53.

Experience:

1969-1974	Executive Director, Ford Training and Placement Program, University of Chicago
1970-1973	Assistant Professor, Graduate School of Education, University of Chicago
1970-1971	Acting Director, TTT Project, University of Chicago
1968-1969	Assistant Director Rough Rock School Evaluation Project, Office of Economic Opportunity - Directed collection of data in Arizona and co-authored report with Donald Erickson - University of Chicago
1967-1968	Research Assistant to Donald Erickson, Midwest Administration Center, University of Chicago. Worked on: Amish Education Study, Michigan Finance Study, Non-public Schools
1964-1966	Assistant Principal, Marshall High School, Chicago Public Schools
1962-1964	Activities Director, Marshall High School, Chicago Public Schools
1958-1961	English and Drama Teacher, Marshall High School, Chicago Public Schools
1956-1957	Field Worker -- Psycholinguistic Project, Hopi Reservation, New Mexico, Northwestern University
1953-1956	Instructor and Director of Drama Program for Evening Division, Northwestern University, Evanston, Illinois
1951-1952	English Teacher - Roosevelt and Tuley High Schools, Chicago Public Schools

Publications

"The Neighbors," a short story, *Saturday Evening Post*, December, 1951.

Community School at Rough Rock, An evaluation for the Office of Economic Opportunity, contract No. B89-4534, April, 1969, with Donald A. Erickson.

"What Rough Rock Shows," with Donald A. Erickson, *Integrated Education*, Volume III, No. 2, March-April, 1970, pp. 21-33.

Editor, *Resource Papers: The Ford Training and Placement Program*, Chicago, University of Chicago Press, April, 1970, mimeo.

"The Practicability of a Theoretical Model," with Wayne Doyle, in *Resource Papers: The Ford Training and Placement Program*, University of Chicago, April, 1970, pp. 16-38, mimeo.

Editor, Post-Conference Report, The Ford Training and Placement Program, Chicago University of Chicago Press, August, 1970, mimeo.

"Responses and Perspectives," Post-Conference Report, The Ford Training and Placement Program, University of Chicago Press, August, 1970, pp 61-66, mimeo.

"A Social Systems Approach to Training Teachers: The Ford Training and Placement Program," Education at Chicago, Volume 1, No. 2, Autumn, 1971, pp 9-15.

Editor, FTPP Conference Reporter: 1971 Spring Conference Report, Chicago, University of Chicago Press, January, 1972, pp. 1-21.

"An Experiment in Training Teachers for Inner-City Schools: A Social Systems Approach in the Ford Training and Placement Program," North Central Association Quarterly, Vol. XLVI, No. 4, Spring, 1972, pp. 375-380.

"An Experiment in Training for Inner-City Schools: A Social Systems Approach in the Ford Training and Placement Program," Abstract of paper presented at AERA, April, 1972.

"Contrived Role Playing and Attitude Change," Ph. D. Dissertation, University of Chicago, September, 1972.

Research in Education, ERIC Journal, November, 1972.

Book Review of Education II: The Social Imperative, by V. M. Kerensky and E. O. Melby, Journal of Adult Education, Winter, 1973.

"When Universities and Schools Relate," Educational Leadership, Volume 30, No. 5, February, 1973, pp. 397-403. (condensed version: ATE Newsletter, Vol. VI, No. 6, July-August, 1973, pp. 2-4.)

"Open Curtain, Open Mind," Administrators Notebook, May, 1973, Univ. of Chicago, Vol. XXI, No. 7.

Monograph: The Ford Training and Placement Program, scheduled in December, 1973.

Consultation Activities

1968-69 Consultant - Performing Arts in the High School - Chicago Drama Teachers Council, Chicago Public Schools.

1969-70 American Indian Center, Chicago, Curriculum Advisory Board and In-Service Programs for Anglo Teachers with Indian Children.

1971-72 College of Education, Northern Illinois University - Urban Education and its Incorporation into a suburban faculty and student body.

1972 State of California - Dr. Richard McNair, Consultant, Teacher Preparation and Licensing Commission, Prepared a position paper on a model for selection and certification of teachers in accordance with the Stull Bill.

1972-73 Chicago Board of Education - In-Service Workshops in October and Symposium presentation in January on the Place of the Fine and Performing Arts in the Secondary School Curriculum.

1973 College of Education, Northern Illinois University - The Development of a Center to study Urban-Suburban Relationships and Tollway-Related Growth in Four Communities.

1973 Roosevelt University - College of Education - Consultant - Development of a Program to train teams of teachers for Urban Schools.

Professional Associates: American Anthropological Association; American Educational Research Association; American Educational Theatre Association; American Association of School Administrators; Association of Teacher Educators; Council on Anthropology and Education of the AAA.

Other Activities

Chicago Council on Foreign Relations; Citizens Schools Committee; Director: On-Stage Little Theatre Group; Member: Curriculum Advisory Committee - American Indian Center, Chicago; Consultant - Chicago Public Schools-Performing Arts Programs.

February, 1972

CURRICULUM VITAE

Mihaly Csikszentmihalyi

Date and place of birth: September 29, 1934; Fiume, Italy

Married: two children

Home Address: 5333 S. Hyde Park Boulevard, Chicago, Illinois 60615
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Office Address: Committee on Human Development, 5730 South Woodlawn
Avenue, Chicago, Illinois 60637
Phone: (312) 753-3748

Present Position: Associate Professor of Human Development and in the College, University of Chicago

Education

University of Chicago 1959-1965; B.A. 1960, Ph.D. 1965 in the Committee on Human Development.
University of Illinois (Chicago) 1957-1959.
Fields of concentration: Human Development, Cognitive Psychology, Creativity, Personality Theories, Cross-Cultural Studies
On various Fellowships 1960-1965.
Classical Gymnasium "Torquato Tasso" (Rome) 1946-1950.

Professional Experience

June 1970 - present: Associate Professor of Human Development and in the College, The University of Chicago.
July 1969-1970: Associate Professor (tenure), Lake Forest College.
Sept. 1967-1970: Chairman, Department of Sociology and Anthropology, Lake Forest College.
July 1966-1969: Assistant Professor, Lake Forest College.
April 1965-1966: Instructor, Lake Forest College.
1963-1965: Research Associate, the Committee on Human Development, The University of Chicago.

Research Experience

1961-1962: Cross-cultural research on adolescents (with R. J. Havighurst).
1963- present: Creative thinking in artists (with J. W. Getzels).
1969- present: Play, sports, autotelic behavior.

Consulting Relationships

1965 - present: Editorial Consultant for the Henry Regnery Publishing House. Final Reader of manuscripts in social science, political science, philosophy. Final Reader of books published in Italy, France, Spain, and Germany.

1968 - present: Director of the Gateway college paperback series.
1968, 1969: Member of Selection Committee, New York State Board of Regents Fellowships for Graduate Study.
1969 - present: Member , Professional Advisory Committee, Lake County United Community Services, Inc.

Papers

Spring, 1965, Conference on a Longitudinal Study of Expressive Behavior in the Arts, Santa Monica, California: "The Criterion Problem in the Measurement of Artistic Creativity" (with Professor J. W. Getzels).

Fall, 1965, 73rd Annual APA Convention, Chicago: "Creativity in Art Students: Personality, Cognition, and the Process of Discovery" (with J.W. Getzels).

Fall, 1966, Lake Forest College Symposium on Karl Marx: "Marx: a Socio-Psychological Evaluation."

Plus a number of open lectures or seminars given at Lake Forest College, The University of Chicago, the Junior League of Chicago, etc.

Publications

(see attached list)

Languages read fluently: English, Italian, French, Spanish, German, Hungarian, Latin.

PROFESSIONAL PUBLICATIONS

Mihaly Csikszentmihalyi

R.J. Havighurst, M.E. Dubois, M. Csikszentmihalyi, R. Doll. Las Actitudes Personales y Sociales de Adolescentes de Buenos Aires y de Chicago - Estudio Comparativo. Union Panamericana: Washington, D.C., 1963 (119 pp.).

R.J. Havighurst, M.E. Dubois, M. Csikszentmihalyi, R. Doll. A Cross-National Study of Buenos Aires and Chicago Adolescents. Karger: Basel, 1965 (80 pp.).

J.W. Getzels and M. Csikszentmihalyi. Creative Thinking in Art Students: an Exploratory Study. HEW Cooperative Research Report #E-008, The University of Chicago, 1964 (202 pp.).

J.W. Getzels and M. Csikszentmihalyi. Creative Thinking in Art Students: the Process of Discovery. HEW Cooperative Research Report #S-080, The University of Chicago, 1965 (104 pp.).

J.W. Getzels and M. Csikszentmihalyi. "Portrait of the artist as an explorer." Trans-action, 1966, 3, 6, 31-35.

J.W. Getzels and M. Csikszentmihalyi. "The study of creativity in future artists: the criterion problem," in O.J. Harvey, ed. Experience, Structure, and Adaptability. Springer: New York, 1966, 349-368.

M. Csikszentmihalyi. "Marx: a socio-psychological evaluation." Modern Age, 1967, 11, 3, 273-282.

J.W. Getzels and M. Csikszentmihalyi. "Scientific Creativity." Science Journal, 1967, Sept., 80-84.

J.W. Getzels and M. Csikszentmihalyi. "Aesthetic opinion: an empirical study." Public Opinion Quarterly, 1969, 33, 34-45.

M. Csikszentmihalyi. "Art and life: an existential approach to the psychology of artistic creation." Journal of Existentialism (in press).

M. Csikszentmihalyi. "A cross-cultural comparison of some structural characteristics of group drinking." Human Development, 1968, 11, 201-216.

M. Csikszentmihalyi (Above article reprinted in digest form in Mental Health Digest, 1969, 1, 3, 39-41.)

M. Csikszentmihalyi. "Are Hippies Real? Some observations on a case of cultural change." Modern Age, 1968, 12, 2, 135-142.

J.W. Getzels and M. Csikszentmihalyi. "The value system of art students as a determinant of their occupational choice and artistic success." Studies in Art Education, 1968, 10, 1, 5-16.

M. Csikszentmihalyi. "The Hippie as a Revolutionary". University of Chicago Magazine, 1968, 60 9, 10-17.

M. Csikszentmihalyi (The above article reprinted in R.J. Havighurst, B. Neugarten, and J. Falk (eds.). Society and Education. Boston: Allyn & Bacon, 1971.

J.W. Getzels and M. Csikszentmihalyi. "On the roles, values, and performance of future artists: a conceptual and empirical exploration." Sociological Quarterly, 1968, Autumn, 516-530.

M. Csikszentmihalyi. "The rigors of play." The Nation, 1969, Feb. 17, 210-212.

M. Csikszentmihalyi (The above article reprinted in Reflections, 1969, 4, 4, 24-30.)

M. Csikszentmihalyi. "The Eclipse of Education." Modern Age, 1969, 13, 4, 389-393.

M. Csikszentmihalyi. "The americanization of rock-climbing." University of Chicago Magazine, 1969, 6, 61, 20-27.

M. Csikszentmihalyi and J. W. Getzels. "Concern for discovery: an attitudinal component of creativity." The Journal of Personality, 1970, 38, 1, 91-105.

M. Csikszentmihalyi. " Sociological Implications in the Thought of Teilhard de Chardin." Zygon, 1970, 5, 2, 130-147.

M. Csikszentmihalyi and S. H. Bennett. "An Exploratory Model of Play." American Anthropologist, 1971, 73, 1, 45-58.

M. Csikszentmihalyi and J.W. Getzels. "Discovery-oriented behavior and the creativity of artistic products: an empirical study." Journal of Personality and Social Psychology, 1971, 19, 1, 47-52.

M. Csikszentmihalyi. "From Thermodynamics to Values--a Transition Yet to Be Accomplished." Zygon, 1971, 6, 2, 163-167.

M. Csikszentmihalyi. "Introduction," A. Comte, General View of positivism. Dubuque: Brown, 1972.

M. Csikszentmihalyi. (Review) Determinism, by B. Berofsky, Zygon 1972 (in press).

M. Csikszentmihalyi. (Review) The Invisible Pyramid and The Night Country by L. Eiseley, Zygon, 1972 (in press).

Miscellaneous Publications

"Poems from the Hungarian Revolution." Chicago Review,1961, 15, 1, 18-26. (Translations from the Hungarian and essay.)

"The wings of defeat." The New Yorker, 1962, Sept. 15, 157-167. (Short story.)

"A sliver at night." The New Yorker (short story, in press).

Books

Roma. H. Regnery: Chicago, 1965 (translation from the Italian of a novel by Aldo Palazzeschi).

Cosmic Clocks. H. Regnery: Chicago, 1967 (translation from the French of a book by Michel Gauquelin).

(Translation of interviews with Norman Mailer and Rap Brown, from the Italian, in The Egotists, by O. Fallaci. H. Regnery: Chicago, 1968.)

Italy in the Golden Centuries. H. Regnery: Chicago, 1969 (translation from the Italian of a book by I. Montanelli and R. Gervaso).

INTRODUCTION TO BUSINESS MANAGEMENT

The Introduction to Business Management examination is designed to measure understanding of the material usually covered in an introductory, one-semester course in the principles of business management and organization. The fact that such courses are offered by a variety of institutions, including collegiate schools of business administration and community colleges, has been taken into account in the preparation of this examination. Those who have acquired their knowledge on the job have the opportunity to demonstrate their achievement through this examination.

The examination includes approximately 100 multiple-choice questions to be completed in 90 minutes. The material covered in the test is distributed approximately as follows:

1. *Manpower and human resources* There may be questions on personnel administration, collective bargaining, human relations and motivation, wage structures, and manpower development (approximately 20 percent).
2. *Operational aspects of management* Topics covered may include production planning and control, PERT, quality controls, methods and time study, operations research and linear programing, automation, inventory control, and equipment-replacement policy and techniques (approximately 20 percent).
3. *Functional aspects of management*-Questions will be included on the four functional aspects of management: planning, organizing, directing, and controlling (approximately 50 percent).
4. *Miscellaneous aspects of management*—Questions may appear on such topics as historical aspects of management, enterprise location, finance, social responsibilities of business, and systems (approximately 10 percent).

Although there is wide variation in the difficulty of individual questions on the test, most are intended to be of only moderate difficulty. Since the test is designed to be fair to people who have been prepared in different ways or have taken courses at different colleges, it is not expected that everyone taking the test will be able to answer every question. For example, at the conclusion of appropriate courses at 28 colleges, the typical "A" student answered approximately 58 percent of the questions correctly, while the typical "C" student on the average answered approximately 37 percent correctly.

There is also an optional essay section containing two questions to be answered in 90 minutes. Whereas the objective test attempts to measure the specific knowledge and understanding of business management you have acquired, the optional essay section is intended to test your ability to relate the principles of business management to current issues and to bring together in a coherent fashion material drawn from different parts of the subject.

SAMPLE QUESTIONS

Directions **Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one which is best in each case.**

1. Which of the following words is NOT logically related to the others?

(A) Planning (B) Directing (C) Producing (D) Controlling (E) Organizing

2. If a company increases its prices, the total revenue line on a break-even chart will

(A) shift upward over its entire length
(B) rise more steeply
(C) be unaffected
(D) rise less steeply
(E) shift downward over its entire length

3. Program Evaluation and Review Technique (PERT) is a system for

(A) developing the organization chart for a company
(B) scheduling and finding the critical path for production
(C) evaluating the performance of workers
(D) reviewing the overall financial condition of the company
(E) programing a computer

4. Which of the following statements about the "exception principle" is (are) correct?

I. It states that anyone who takes exception to a directive should report the basis of his disagreement or objection to his superior immediately.

II. It is concerned with correctly identifying what should be the logical "exceptions to every rule."

III. It is an important control concept.

(A) I only (B) II only (C) III only (D) I and III only (E) II and III only

5. Which of the following can be best determined by consulting an organization chart?

   (A) The size of the company
   (B) The relationships of people
   (C) The nature of work performed
   (D) The relationship of positions
   (E) The quality of management of the firm

6. Which of the following best illustrates informal organization?

   (A) Line authority, such as that of the field marshal and battalion commander in the military
   (B) Staff authority, such as that of personnel or cost control in manufacturing
   (C) Functional authority, such as corporate supervision of the legal aspect of pension plans in branch plants
   (D) The acceptance of authority by subordinates
   (E) Groupings based on such things as technical ability, seniority, and personal influence

7. For which of the following types of production control is dispatching most difficult?

   (A) Customer orders (B) Continuous production
   (C) Repetitive production (D) Job-shop production
   (E) Storage lot

8. Which of the following typically requires more interpretation than the others?

   (A) A rule
   (B) A policy
   (C) A procedure
   (D) They require equal interpretation.
   (E) If formulated properly, none should require interpretation.

9. The study of the degree of functional relationship among two or more variables is called

   (A) factor analysis (B) simulation
   (C) game theory (D) correlation analysis
   (E) programing

10. Douglas McGregor's "Theory Y" provides management with which of the following?

    (A) An understanding of those assumptions of human behavior deduced from the concept of the "rational economic man"
    (B) A sound indication that production-centered supervisors are less effective than employee-centered supervisors
    (C) The idea that employees are most effectively motivated when guided by a clearly expressed system of rewards and penalties
    (D) A set of assumptions regarding human behavior implicit in much of the literature of traditional management
    (E) None of the above

11. Assume that a company uses the economic-order-quantity concept in determining the number of units to produce during a given production run. If the production set-up costs increase, and the other relevant costs remain constant, what happens to the new economic order quantity?

    (A) It is larger.
    (B) It remains the same.
    (C) It is smaller.
    (D) It cannot be determined because it is a function of demand usage and inventory carrying costs.
    (E) None of the above is correct.

12. Henry Gantt, Frank Gilbreth, and Frederick Taylor are considered pioneers in the school of management generally referred to as the

    (A) management-process school
    (B) empirical school
    (C) scientific-management school
    (D) behavioralist school
    (E) social-system school

Answer Key to Sample Questions
(Introduction to Business Management)

1. C
2. B
3. B
4. C
5. D
6. E
7. D
8. B
9. D
10. E
11. A
12. C

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INTRODUCTORY ACCOUNTING

The Subject Examination in Introductory Accounting is designed to measure the knowledge and ability of a person who has completed one academic year of accounting or has had equivalent training. This examination is intended for those who have had the equivalent of two semesters or three quarters of financial accounting, including some basic managerial accounting topics, or who have completed one semester of financial accounting and one semester of managerial accounting.

A candidate taking this test should be familiar with accounting concepts and terminology. He should be able to prepare and use financial reports issued for both internal and external purposes and apply accounting techniques to simple problem situations involving computations. He should also understand the rationale for generally accepted accounting principles and procedures.

More than half of the examination deals with financial accounting topics such as: concepts and principles, rules of double-entry accounting, the accounting cycle, presentation of and relationships between general-purpose financial statements, valuation of accounts and notes receivable, valuation of inventories, initial costs of plant assets, depreciation, long-term debt, capital, cash and stock dividends, treasury stock, purchase and sale of merchandise, revenue and cost apportionments, financial statement analysis, and partnership accounting (division of profits and losses).

The remainder of the examination deals with managerial accounting topics such as: analysis of departmental operations, process and job-order cost systems, standard costs and variances, direct costing and absorption costing, cost-volume-profit (breakeven) analysis, funds flow analysis, use of differential (relevant) cost, and performance evaluation.

The test includes approximately 80 multiple-choice questions to be answered in 90 minutes. Although there is wide variation in the difficulty of individual questions on the test, most are intended to be of only moderate difficulty. Since the test is designed to be fair to people who have been prepared in different ways or have taken courses at different colleges, it is not expected that everyone taking the test will be able to answer every question. For example, at the conclusion of appropriate courses at 33 colleges, the typical "A" student answered approximately 67 percent of the questions correctly, while the typical "C" student on the average answered approximately 50 percent correctly.

The 90-minute optional essay section contains six questions. This section is intended to examine the same general knowledge as the multiple-choice test, but on a broader level. The essay topics test the candidate's ability to apply generally accepted accounting concepts and procedures to a stated problem and to combine coherently material from various areas of accounting.

SAMPLE QUESTIONS

Directions: **Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one which is best in each case.**

1. The owner's equity in a business may derive from which of the following sources?

I. Excess of revenue over expenses
II. Investment by the owner
III. Accounts payable

(A) I only (B) II only (C) III only
(D) I and II only (E) I, II, and III

2. Treasury stock may be correctly defined as

(A) a corporation's own stock that has been issued and then reacquired
(B) new issues of a corporation's stock before they are sold on the open market
(C) stock issued by the United States Office of the Treasury
(D) any stock that a corporation acquires and holds for more than 90 days
(E) any stock held by a corporation that receives dividends in excess of 5% of initial cost of the stock

3. If fixed expenses are $26,000 and variable expenses are 75 percent of sales, the net income that would result from $500,000 in sales is

(A) $75,000 (B) $99,000 (C) $200,000
(D) $375,000 (E) $401,000

4. Company X produces chairs of a single type, has a plant capacity of 50,000 chairs per year, and total fixed expenses of $100,000 per year. Variable costs per chair are $2 and the current selling price is $5 per chair. At the beginning of 19x1, the company purchases a specialized machine that costs $10,000, lasts one year, and reduces variable costs to $1.50 per chair. If the company produces and sells at 90 percent of capacity, what would be the net income for 19x1?

(A) $8,750 (B) $23,000 (C) $47,500
(D) $50,000 (E) $83,000

5. Green Corporation with assets of $5,000,000 and liabilities of $2,000,000 has 6,000 shares of capital stock outstanding (par value $300). What is the book value per share?

(A) $200 (B) $300 (C) $500
(D) $833 (E) None of the above

6. At the end of the fiscal year, a company estimates that $4,300 of Accounts Receivable will be uncollectible. If, prior to adjustment, the company's Allowance for Bad Debts account has a credit balance of $1,600, what is the appropriate adjusting entry?

	Debit	*Credit*	*Amount*
(A)	Allowance for Bad Debts	Bad Debts Expense	$4,300
(B)	Allowance for Bad Debts	Accounts Receivable	$4,300
(C)	Accounts Receivable	Allowance for Bad Debts	$1,600
(D)	Bad Debts Expense	Allowance for Bad Debts	$2,700
(E)	Bad Debts Expense	Accounts Receivable	$2,700

7. During January, manufacturing overhead for ABC Company was $45,000 of which $25,000 was fixed and $20,000 was variable. The direct labor hours for January were 5,000. During February, the company expects to work at a level of 10,000 direct labor hours. Assuming the company uses its experience of the previous month for estimating overhead, the manufacturing overhead cost per direct labor hour in February should be

(A) $3.50 (B) $5.00 (C) $6.50
(D) $9.00 (E) $9.50

8. All of the following statements about LIFO inventory valuation are true EXCEPT:

(A) LIFO stands for last in, first out.
(B) In a time of rising prices, LIFO produces a lower inventory than FIFO.
(C) The inventory value is directly related to the quantity of items in inventory.
(D) In a time of constant prices, the LIFO value equals the FIFO value.
(E) In a time of falling prices but increasing number of items in inventory, LIFO tends to produce a lower inventory than FIFO.

9. Which of the following standard cost variances provides information about the extent to which the manufacturing plant of a company was used at normal capacity?

(A) Materials quantity (usage) variance
(B) Labor efficiency (time) variance
(C) Labor rate variance
(D) Overhead spending (controllable) variance
(E) Overhead volume variance

10. X Corporation declares and issues a 5 percent stock dividend on common stock, payable in common stock, shortly after the close of the year. All of the following statements about the nature and effect of the dividend are true EXCEPT:

(A) The total stockholders' equity in the corporation is not changed.
(B) The dividend does not constitute income to the stockholders.
(C) The book value per share of common stock is not changed.
(D) The amount of retained earnings is reduced.
(E) The amount of total assets is not changed.

Answer Key to Sample Questions
(Introductory Accounting)

1.	D	3.	B	5.	C	7.	C	9.	E
2.	A	4.	C	6.	D	8.	E	10.	C

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